

# Part 108 Airplane Operator Security

This edition replaces the existing loose-leaf  
Part 108 and its changes.

This FAA publication of the basic Part 108, effective September 11, 1981,  
incorporates Amendments 108-1 through 108-11 with preambles.

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PART 108

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air carriers. The consolidation facilitates public access to FAA security regulations and provides an appropriate response to the current threat of criminal violence and air piracy against scheduled and public charter operations of U.S. air carriers, intrastate operators, and foreign air carriers.

**FOR FURTHER INFORMATION CONTACT:** Mr. H.E. Smith, Regulatory Projects Branch, (AVS-24), Safety Regulations Staff, Associate Administrator for Aviation Standards, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 755-8716.

**SUPPLEMENTARY INFORMATION:** On November 1, 1979, the FAA published Notice of Proposed Rule Making No. 79-17 (44 FR 63048), to extend the FAA security regulations applicable to scheduled passenger and public charter operations of U.S. and foreign air carriers and U.S. intrastate operators to certain air taxi operators and small airplane operations conducted by U.S. and foreign operators. It also proposed to simplify these regulations and consolidate them (for U.S. certificate holders) into a new part of the Federal Aviation Regulations to facilitate public access to security regulations.

All interested persons have been given an opportunity to participate in the making of this new part 108 and the revisions to parts 107, 121, 129, and 135. Due consideration has been given to all matters presented. In response to comments received and after further study by the FAA, a number of changes are reflected in the rule as adopted.

### **Background**

Since their inception in 1972, FAA security regulations have been designed to meet threats of hijacking and other crimes against the specific kinds of aircraft operations that have proven to be most attractive to the potential hijacker or saboteur. For the most part these operations have involved large transport type airplanes with scheduled departure times, and generally have been conducted by air carriers under Certificates of Public Convenience and Necessity (CPCN) and other limited economic authority issued by the Civil Aeronautics Board (CAB), as well as by certain wholly intrastate operators who are not air carriers. Operating rules for these operators are set out in part 121 (14 CFR part 121) and, for this reason, FAA security regulations were initially placed in that part.

Scheduled operations with large airplanes also have been conducted under § 135.2 of part 135 (14 CFR part 135). Security for these operations has been achieved through voluntary compliance with requirements similar to those in part 121; however, the number of these operations is increasing.

Recently, and in particular since the passage of the Airline Deregulation Act of 1978 (Deregulation Act), the CAB has liberalized its policies and has granted broad authority to conduct scheduled operations with large aircraft. There now are numerous air carriers referred to in the Deregulation Act as "commuters" operating under part 135 with authority to conduct operations similar to those that were previously conducted only by CPCN holders under part 121. While CPCN holders are being allowed to discontinue service at different terminals, commuter air carriers are gaining these terminal and route authorizations. As a result, commuter air carriers are now using identical aircraft in scheduled and public charter operations formerly used only by CPCN holders. These airplanes are being operated over routes formerly served by CPCN holders, and the operations are conducted without being subject to full FAA security requirements.

The Deregulation Act carries with it a mandate that there be no diminution in safety in situations where commuter carriers provide substitute service on routes previously served by route carriers. Section 33(c)(3) of the Deregulation Act requires the FAA to "impose requirements upon such commuter air carriers to assure that the level of safety provided to persons traveling on such commuter air carriers is, to the maximum feasible extent, equivalent to the level of safety provided to persons traveling on air carriers which provide service pursuant to certificates issued under section 401 of this title."

### **The Proposal**

To ensure consistent application of FAA's security rules and to achieve the necessary level of security, Notice 79-17 proposed security requirements based upon airplane complexity instead of CAB authorizations.

A number of changes have been made in the final rules, as discussed in this preamble. A table is provided for comparing the major provisions of the proposed rule and the final amendments. It is to assist in understanding the changes that have been made and should not be relied upon as a complete statement of the amendments.

Passenger Seating Configuration	Security Requirements
<b>NOTICE OF PROPOSED RULE MAKING</b>	
1-19	Modified airplane and airport operator security program would have been adopted and implemented
more than 19	Full airplane and airport operator security program would have been adopted and implemented, including screening of all passengers and law enforcement presence.
<b>FINAL AMENDMENTS</b>	
1-30	No security program is required unless passengers have uncontrolled access to a sterile area and then a screening system and law enforcement presence must be provided for those passengers.
31-60	Airplane and airport operator security program must be adopted, but screening and law enforcement presence must be implemented only when the FAA identifies a security threat or passengers have uncontrolled access to a sterile area.
more than 60	Full security program must be adopted and implemented, including screening of all passengers, law enforcement presence, and other significant safeguards.

### Comments

Approximately 320 public comments were received in response to Notice 79-17. Nearly all of the commenters were against the proposal. The major objections were the cost of implementing the security requirements and the absence of any threat that justified extending screening and other security requirements to commuter operations. The commenters argued that the proposal would place an undue hardship on small communities and inhibit industry growth by causing commuters to avoid use of larger airplanes in order to gain advantage of the minimal security requirements for airplanes with less than 20 passenger seats.

### Economic Study

In analyzing financial data provided by the commenters, the security costs per passenger enplanement were found to vary so much that the FAA decided that further economic study was necessary. A sample of typical airports was examined to determine what the actual costs would be to implement the proposed requirements. The results of this small sampling indicated that a comprehensive indepth cost study was needed.

This indepth study identified potentially affected airplane operators (25) and airports (20). The personnel of FAA regional security divisions completed structured interview forms for each potentially affected airline station (90) and for each airport. This information was collected and analyzed by the FAA's Office of Aviation Policy and Plans; and in many cases followup discussions were held with airline and airport personnel. The final regulatory evaluation that resulted from this study is available in the public docket for this rule making action.

The study indicates that the FAA estimated costs provided in Notice 79-17 are generally accurate when considered against the total projected enplanements. However, when viewed for a particular airport, or for a particular flight, costs might be unreasonably high because of the limited enplanements at that airport or for that flight.

Considerable reduction in the cost impact of this final rule has been effected through the changes in the proposal. While adoption of Notice 79-17 could have resulted in an estimated maximum annual operating cost of \$8.80 million and maximum capital investments of \$5.30 million (for airplane operators) and \$.36 million (for airports), the maximum annual operating cost for the final rule will not exceed



While the threat of air piracy and sabotage exists for all levels of air transportation, the historical record clearly establishes that the threat is very serious for some levels and less serious for others. Although all sizes of aircraft have been subjected to hijackings, the most severe threat has been against the larger, longer-range, jet airplanes in scheduled passenger operations. Typically these airplanes have more than 60 passenger seats, the smallest being the BAC-111, which may be configured for as few as 65 passenger seats, and the more commonly used DC-9, which is typically configured for approximately 90 passenger seats. The number of U.S. hijackings of such airplanes has continued to rise in relation to worldwide hijackings and, over the past 3 years, the U.S. air transportation system has experienced 40 hijackings of these air carrier airplanes.

### **Final Rule**

Considering the economic burden that could be imposed on the small airport and airplane operators and the fact that the hijacking threat directed against commuters has not significantly increased, it is not appropriate to fully implement the proposed rule changes at this time. This final rule requires implementing a full security program only for scheduled and public charter operations with airplanes having a passenger seating configuration of more than 60 seats and for operations providing deplaned passengers access to a sterile area at the next landing when the access is not controlled by another airplane operator's security program.

For operations with airplanes having a passenger seating configuration of more than 30 but less than 61 seats, a full security program need not be implemented. A full program for these operations will have to be implemented only if the FAA notifies the airplane operator that a security threat exists with respect to a particular operation or set of operations.

While the frequency and extent of these threats cannot be predicted, the FAA expects that this contingency seldom will be invoked. If it is, it will probably not involve all airplane operators or all points served by a single operator, nor would all precautions have to be taken in every contingency.

Antihijack security training will continue to be required for all crewmembers of FAA certificate holders operating under part 121 or part 135. In addition, throughout part 108 and the changes to part 107 and § 129.25 of this chapter, the term "airplane" instead of "aircraft" is used since threatened operations have only involved airplanes and no other aircraft.

### **Airplane Operator Security Requirements**

None of the comments suggest, nor does FAA intend, lessening in any way the current security requirements for U.S. or foreign air carriers utilizing airplanes configured for more than 60 passenger seats or for U.S. airports presently served by these carriers on a regular basis. To ensure that passengers in scheduled or public charter operations with these airplanes benefit from a degree of security commensurate with the existing threat, the rule, as adopted, continues to require the implementation of a full security program for these operations.

For airplanes with a passenger seating configuration of less than 61 seats, the larger the airplane, the more attractive it can be expected to be for the potential hijacker. The great majority of airplanes currently used by commuters are of less than 31 seat configuration. However, a number of larger airplanes are now in production or "on the drawing board" to serve the commuter airline market. The larger airplanes have a greater stage length and fuel capacity and carry many more passengers than those in current use. As a result, potential hijackers are more apt to see them as containing more hostages and having the range to serve their purposes.

Additionally, the FAA's economic study generally reflects significant increases in security costs per passenger as the airplane capacity decreases. The study indicates that for the lower half of the spectrum (the 1- through 30-seat airplanes), the economic hardship far outweighs the security benefit derived from even the minimal security requirements proposed in Notice 79-17 for airplanes configured for less than 20 seats.

instructing them when and how to use them. If the operator also uses airplanes above 60 seats, a full security program must be implemented for these operations.

Each operator of 31-through 60-seat airplanes must be prepared to implement its full security program for all or part of its operations at a particular station or systemwide upon notification by the FAA that a threat exists. Such a threat would exist, for example, where operations in this category have been subjected to hijacking and a specific threat has been made that more hijackings will be perpetrated. Such a threat might also exist where information has been received or developed concerning airplanes in this category without a prior hijacking.

FAA certificate holders utilizing airplanes with a seating configuration of 1 through 30 seats, under the provisions of this rule, are only required to conduct antihijack crew training currently required by § 135.331. Because of the size, range, and public perception of the capacity and capability of these airplanes, this reactive security measure is considered adequate to meet the level of threat against this type operation.

#### **Law Enforcement Support**

When a U.S. or foreign air carrier is required to implement a security screening system at an airport governed by part 107, the airport operator is required to provide law enforcement support for that screening. When a carrier conducts operations from an airport not governed by part 107 of this chapter and is required to use a screening system, the carrier continues to be required to provide law enforcement officers to support the screening system.

#### **Access to Sterile Areas**

To protect the security of sterile areas, this amendment provides that operators of airplanes of any seating configuration may not discharge scheduled or public charter passengers into a sterile area unless: (1) the passengers and their accessible items are properly screened by the airplane operator; or (2) their access is controlled through surveillance and escort procedures or through the screening procedures of another operator.

Thus, unscreened passengers may have access to a sterile area where the discharging operator has made a prior arrangement with another FAA certificate holder or foreign air carrier, or in some cases the airport operator, having responsibility for the sterile area either for escort of the deplaning passengers into, through, and out of the sterile area or for the screening of those passengers before entry. Without these arrangements, operators not otherwise required by part 108 or 129 to screen their passengers who wish to deplane their passengers in a particular operation into a sterile area at a particular airport must adopt and implement all the provisions of an appropriate security program with respect to that passenger operation. This requires that: (1) 100 percent screening of the passengers and their accessible items be completed before the last departure; (2) the airplane be protected; and (3) procedures be used to prevent or deter the introduction of explosives and incendiaries into checked baggage and cargo for those flights.

This process currently is being followed by a number of air carriers operating under § 135.2. These air taxi and commuter operators, because of their desire to allow their passengers to have direct and uncontrolled access to a sterile area, have voluntarily elected to amend their operations specifications to adhere to the security requirements of § 121.538. With implementation of part 108, this will no longer be necessary, and operators requiring direct uncontrolled access to sterile areas for their passengers will follow the security program procedures in § 108.25.

As a result of these amendments, certain FAA certificate holders that operate smaller airplanes and have been required to meet the security provisions of § 121.538 are no longer required to implement full security programs. Under § 108.5 these operators or other operators utilizing 1- through 60-seat airplanes may elect to continue to operate under a full security program in order to discharge passengers into a sterile area, or may elect to operate under a full or modified security program to meet passenger

## **Airport Security Requirements**

At U.S. airports regularly serving scheduled passenger operations of FAA certificate holders and foreign air carriers utilizing airplanes with more than 60 seats, this final rule requires the airport operator to adhere to the current provisions of part 107.

At those airports regularly serving scheduled passenger operations utilizing 31- through 60-passenger-seat airplanes and at which the airplane operator is not required to screen its passengers, the airport operator must only identify the law enforcement agency that will respond to the airplane operator's request for assistance. Responsibility for establishing and implementing the actual arrangements and for obtaining assistance in the case of an incident rests with the airplane operator.

For these operations, the airport operator is required to submit to the FAA for approval a security program that identifies: (1) the law enforcement support available to respond upon request of the airport operator; (2) a description of the procedure to be used by the air carrier to summon support; (3) a description of the training the law enforcement officers have received; and (4) a description of the system of records of law enforcement actions taken in support of aviation security as called for by § 107.23.

If an airplane operator using airplanes with less than 61 passenger seats must adopt and carry out a full security program with a screening system, the airport operator must provide law enforcement support during all required passenger screening operations. The airport operator is required to submit to the FAA for approval a security program identifying the law enforcement support, the training received by law enforcement officers, and a description of the system for recording law enforcement actions taken in support of aviation security. These law enforcement support requirements are the only security requirements imposed on the airport operator for operations with airplanes configured for less than 61 passenger seats where screening is performed under a required security program.

## **Economic Evaluation**

Assessment of the economic impact of these amendments indicates that certain airplane and airport operators not previously required to have a security program may incur some costs in connection with scheduled and public charter passenger operations with airplanes having a passenger seating configuration of 31 through 60 passenger seats. Some additional costs will occur for these operators if they must implement contingency procedures included in security programs because of a threat condition. Most, if not all, of the costs of meeting contingencies would be associated with personnel and would not involve investments in X-ray machines, metal detectors, and alterations to airport terminals as might have been the case if the proposal in Notice 79-17 had been adopted. If a threat situation occurs, the FAA will work closely with the affected parties to ensure adequate, efficient, and cost-effective implementation of contingency procedures.

The only other new cost resulting from this rule may occur when some operators of airplanes with less than 61 passenger seats desire to discharge passengers directly into a sterile area. No additional cost will occur to the many operators already voluntarily providing security for these operations through amendments to their operations specifications. Airplane operators that do not now provide this security, and who desire access to a sterile area, will incur new costs for providing the necessary security safeguards.

The economic assessment indicates that the final rule may have an impact on 11 part 135 operators of airplanes seating 31 through 60 passengers at as many as 39 stations. Virtually all of this cost impact would occur if contingency procedures are implemented. Based on the FAA's analysis of the current threat, coupled with the historical record, airplane and airport operators will rarely, if ever, be required to take these heightened precautions and a threat necessitating such action would probably never involve all 11 carriers or 39 stations at a time.

However, in the unlikely event that all operators of 31- through 60-seat airplanes are required to implement contingency procedures at all stations for an entire year because of the greatest hijacking

case, all part 135 operators now screening voluntarily under an operations specifications amendment can elect to discontinue screening under this rule if they choose not to continue to have access to a sterile area. While the FAA cannot determine the exact amount of cost savings, it estimates the maximum possible annual operating cost savings of \$13,720,526.

#### **Adoption of the Amendment**

Accordingly parts 107, 121, 129, and 135 are amended and new part 108 is added as follows, effective April 1, 1981, or 60 days after a notice of approval of the recordkeeping and reporting requirements of new part 108 by the Office of Management and Budget is published in the *Federal Register*, whichever is later.

(Secs. 313, 315, 316, 317, 601-610 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1356, 1357, 1358, 1421-1430); Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)).)

This rule is a final order of the Administrator as defined by section 1005 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1485). As such, it is subject to review only by the courts of appeals of the United States or the United States Court of Appeals for the District of Columbia.

NOTE: The FAA has determined that this document involves a proposed regulation which is not significant under Executive Order 12044 as implemented by DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). A copy of the regulatory evaluation prepared for this action is contained in the regulatory docket. A copy of it may be obtained by contacting the person identified under the caption "FOR FURTHER INFORMATION CONTACT".

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#### **Reference New Part 108—Airplane Operator Security**

**Adopted: June 15, 1981**

**Effective: September 11, 1981**

**(Published in 46 FR 36053, July 13, 1981)**

**SUMMARY:** This document prescribes the effective date for a new part of the Federal Aviation Regulations that consolidates security regulations for scheduled passenger and public charter operations and extends those regulations to certain commuter and air taxi operations and small airplane operations conducted by U.S. and foreign air carriers. At the time this new part was adopted, its reporting and recordkeeping requirements had not been approved by OMB, and the part could not be made effective. That approval process has now been completed.

This document also corrects a reference in the words of issuance of Amendment 107-1.

**FOR FURTHER INFORMATION CONTACT:** Joseph A. Sirkis, Regulatory Projects Branch, (AVS-24), Safety Regulations Staff, Associate Administrator for Aviation Standards, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 755-8716.

**SUPPLEMENTARY INFORMATION:** On January 12, 1981, the FAA adopted amendments that added a new part 108, Airplane Operator Security (46 FR 3782; January 15, 1981), and amended other associated security regulations. The new part revises and consolidates aviation security regulations for scheduled passenger and public charter operations, and extends those regulations to certain commuter and air taxi operations and small airplane operations conducted by U.S. and foreign air carriers. The consolidation facilitates public access to aviation security regulations. The changes provide an appropriate response to the current threat of criminal violence and air piracy against scheduled and public charter operations of U.S. air carriers, intrastate operators, and foreign air carriers.

the economic burden that could be imposed on the small airplane operators and the fact that the hijacking threat directed against commuters has not significantly increased. It was determined that the implementation of a full security program should only be required for scheduled and public charter operations with airplanes having a passenger-seating configuration of more than 60 seats and for operations providing deplaned passengers access to a sterile area at the next landing when the access is not controlled by another airplane operator's security program. Accordingly, part 108 provides that for operations with airplanes having a passenger-seating configuration of more than 30 but fewer than 61 seats a full security program need not be implemented.

For part 108 to be effective immediately for any operator, the operator need only advise the Director of Civil Aviation Security of its intention to comply with the part.

#### **Correction**

In connection with new part 108, the airport operator security rules in part 107 were also amended (Amendment 107-1) to relate the airport operator's responsibilities, including law enforcement support, to the level of security required for airplane operators using the airport.

Section 107.7 requires the airport operator to notify the FAA, and appropriately amend its security program, whenever certain changed security conditions occur. Specifically, § 107.7(a)(4) provides that this action must be taken when the law enforcement support, as described in the airport operator's security program, is not adequate to comply with § 107.15. Amendment 107-1 was intended to add references in § 107.7(a)(4) to new security program requirements. However, because that provision is misnumbered in the current bound version of the Code of Federal Regulations (14 CFR 107.7), the amending language erroneously referred to it as § 107.7(a)(3). This amendment corrects the amending language to refer to § 107.7(a)(4). The Code of Federal Regulations will be corrected when it is next published in bound form.

#### **Effective Date and Correction**

Accordingly, Amendments No. 107-1, 108 (New), 121-167, 129-11, and 135-10 will be effective September 11, 1981, or, for a certificate holder to which new part 108 would apply, on the date that the certificate holder notifies the Director of Civil Aviation Security of its intention to comply with the part, whichever date is earlier. The words of issuance of Amendment 107-1 are corrected to amend § 107.7(a)(4), instead of § 107.7(a)(3), by inserting the phrase “, (f)(1), or (g)(1)” after the phrase “§ 107.3(b)(7)”.

(Secs. 313, 315, 316, 317, 601-610 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1356, 1357, 1358, 1421-1430); Sec. 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).)

NOTE: The FAA has determined that this document pertains to a rulemaking action which is not a major regulation under Executive Order 12291; that it is not significant under Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and that, under the criteria of the Regulatory Flexibility Act, it will not have a significant impact on a substantial number of small entities. In addition, the FAA has determined that, while a regulatory evaluation was prepared for the final rule, the expected further impact of this notice and correction is so minimal that it does not require an evaluation.

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with required security programs. It also adopts a new standard for testing the effectiveness of these X-ray systems. A more realistic standard will result with the adoption of the revisions, one that will enhance overall security by requiring the X-ray systems to comply with a more realistic imaging standard and at the same time protect film and photographic materials.

The incorporation by reference of American Society of Testing and Materials Standard F792-82 listed in the regulations is approved by the Director of the Federal Register as of July 22, 1985.

**FOR FURTHER INFORMATION CONTACT:** Mr. Theofolus P. Tsacoumis, Aviation Security Division, (ACS-160), Office of Civil Aviation Security, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 426-4817.

## **SUPPLEMENTARY INFORMATION:**

### **Background**

On May 22, 1984, the Federal Aviation Administration (FAA) issued notice of proposed rulemaking (NPRM) No. 84-8 (49 FR 24974; June 18, 1984) pertaining to the use of X-ray systems by domestic, flag, and foreign air carriers and by commercial operators of large aircraft engaging in common carriage. This notice proposed the revision of the language of signs that notify passengers that an X-ray system is being used to inspect carry-on baggage in accordance with required security programs. The NPRM recommended that the signs be changed to read "Remove x-ray, scientific, and high-speed film." The notice also proposed the adoption of a new standard for testing the effectiveness of X-ray systems. The new standard uses a step wedge specified in American Society of Testing and Materials (ASTM) Standard F792-82. In addition, the notice proposed to extend the rule to cover X-ray systems that are used to process checked baggage. Also proposed was a correction to an editorial error in § 108.17(a)(4) in that the dosimeter provided to each operator is a "personnel" dosimeter, not a "personal" dosimeter. Notice 84-8 solicited comments with respect to these proposals. Comments were also requested concerning any increase in the number of searches by hand that might occur and any other burden that might be caused by this proposal.

### **Discussion of Comments**

In response to Notice 84-8, 12 written and one telephonic comment were received. One manufacturer comments that a sign should be posted advising passengers to remove all X-ray, scientific, and high-speed film from either their carry-on or checked baggage before inspection only if the X-ray system exposes any such item to more than .01 milliroentgen (mR) per inspection. Another manufacturer states that since a majority of X-ray systems used at domestic air terminals at present are scanning-type systems, the rule, as adopted, should state that any X-ray system that can demonstrate that a maximum of not more than 0.15 mR is required per inspection, while meeting all other requirements of the proposed rule, will be permitted to display signs suggesting the removal of X-ray and scientific film only, and that the high-speed film removal language will be deleted. This manufacturer also recommends that the proposed rule be modified so that any scanning-type X-ray system currently in use but unable to meet the imaging requirements of the step wedge specified in ASTM Standard F792-82 will be modified so as to meet the imaging requirements or be removed from service.

Another manufacturer expresses concern that requiring advice on signs to "remove X-ray, scientific, and high-speed film" would cause the certificate holders undue hardship. In addition, this manufacturer states that the FAA should distribute or sell the required step wedge to the certificate holders since they believed that a competitor would have an unfair advantage.

One film manufacturer, while expressing gratitude for the positive steps and concern demonstrated by the FAA relative to high-speed film, recommends development of a new sign that is larger and contains bigger and bolder lettering for prominent placement in the entranceways to airport X-ray screening checkpoints. The commenter also recommends development of a special warning decal which would be

The FAA has determined that the proposed requirement to advise passengers to remove all X-ray, scientific, and high-speed film from carry-on and checked articles prior to X-ray inspection (without regard to radiation levels) and to remove all film from carry-on and checked articles in the event radiation exposure exceeds 1 mR is adequate to protect photographic film from being adversely affected by radiation. No problems have been encountered with this requirement since the original X-ray rule became effective. Experience since "paste-on" stickers were put into use during May 1983, advising persons to remove "high-speed" film, has not revealed any substantiated incidents of damage to film as a result of its being exposed to an X-ray system utilized under §§ 108.17 and 129.26 of the FAR. Experience has also shown that, since the "paste-on stickers" have been utilized, the additional number of hand searches caused by these signs has not created a significant burden.

In addition, signs advising passengers about X-ray inspections should be as uniform as possible. Under the current rules, all certificate holders may use an identical sign unless a carrier utilizes a system emitting more than 1 mR of radiation. In such case, passengers must be advised to remove *all* film prior to inspection rather than just X-ray, scientific, and high-speed film. Since to our knowledge all systems currently in use in the United States emit less than 1 mR and many are in the 0.15 to 0.30 mR range, virtually all certificate holders use a standard sign supplied to them by the FAA. Even though, as indicated by one commenter, some machines may subject film to as little as .01 mR, industry concerns over damage to X-ray, scientific, and high-speed film warrant a uniform requirement for these signs.

With regard to signs, the FAA intends to study how the sign may be improved so as to properly highlight and prominently display the required information at screening stations that utilize X-ray baggage inspection systems. The FAA will consider the views of such organizations as the Air Transport Association, the American Association of Airport Executives, and the Airport Operators Council International. It is intended that a new sign will be developed that would enhance the notice now being given to the traveling public concerning their photographic equipment and film.

One individual is concerned that the requirement to inspect physically photographic equipment and film packages upon request be continued. Another individual suggests that the FAA be more specific with the term "high-speed film," while a third individual agreed with the proposal but suggested a change in language to read "Remove X-ray, scientific, and all camera film." A fourth individual commented telephonically that the FAA should not allow the use of any X-ray systems to screen baggage at airports. A municipality suggests that scientific and high-speed film with an ASA/ISO speed of more than 400 should be removed prior to X-ray inspection.

The FAA has determined that film speeds with an ASA/ISO reading of 400 or below are safe for X-ray inspection and need not be subjected to hand search or inspection. Therefore, it would not be appropriate to specify high-speed film as being ASA/ISO 400 and above. In addition, the FAA intends to retain the requirement that photographic equipment and film packages be physically inspected upon request. Thus, each person will determine the proper actions to be taken to safeguard his or her film.

X-ray baggage inspection systems to process carry-on baggage and items have been in use since 1973. The FAA is not aware of any specific instance of any damage to ordinary film caused by X-ray systems used in the United States that is substantiated by factual evidence. Therefore, it is not necessary to remove all camera film before X-ray examination. In addition, the FAA requires that these X-ray systems meet the Food and Drug Administration requirements specified in 21 CFR 1020.40. To our knowledge, there have been no instances where these systems had excessive leakage or the operators received an excessive dose as measured by the dosimeters each operator is required to wear. Therefore, there is no need to remove X-ray systems from all airports.

A trade association representing many of the major film manufacturers suggests that the sign posting requirements be modified so that the signs must be posted not only in a conspicuous place, but also at or near the X-ray systems and at the checked baggage stations as well. The commenter favors adoption of ASTM Standard F792-82. Another association recommends that the term "checked articles" be used in lieu of "checked baggage" and that the FAA should allow the use of X-ray systems at any location

carrier. The FAA is adopting the suggestion that "checked baggage" be changed to "checked articles." One commenter expressed concern that a step wedge would be required at each screening station. However, this is not required by the regulation. Nevertheless, since X-ray systems must meet the specified imaging requirements, it is not unreasonable to expect that carriers will want to have a step wedge at each screening station, so that FAA inspectors and airline representatives can quickly determine if the X-ray system meets these imaging requirements. It is not necessary to substitute the phrase "inspection may affect film" since, as previously stated, the FAA is not aware of any substantiated damage caused by X-ray systems.

#### **Discussion of the Amendments**

As proposed in Notice 84-8, §§ 108.17 and 129.26 are being amended to extend their application to checked baggage as well as carry-on items since certificate holders from time to time utilize X-ray imaging systems to inspect checked baggage; to adopt the language of previously produced and distributed paste-on stickers stating "Remove X-ray, scientific, and high-speed film;" to adopt a new imaging standard; and to correct an editorial error in § 108.17(a)(4) involving the misuse of the term "personal" dosimeter. Another editorial change is being made by replacing the word "will" in § 108.17(a)(4) with "shall." This will clarify the mandatory nature of the provision and conform to language used throughout the Federal Aviation Regulations.

The FAA proposed in Notice 84-8 to establish a new imaging standard for inclusion in the airline standard security program and included such a standard as part of the proposed rule. Specificity regarding the imaging standard has been eliminated from the rule as adopted to prevent access by persons attempting to frustrate the system. The standard is being placed in the air carrier standard program of domestic and flag air carriers. The same standard will be separately specified in a letter to foreign air carriers.

To reduce any possibility of confusion and to preclude a recurrence of past incidents, the FAA is adopting a suggestion from one of the commenters by inserting the word "individual" in front of "personnel dosimeter" in § 108.17(a)(4). This should make it clear to everyone concerned that the dosimeter must be assigned to one person and should not be given to others.

In response to several comments and to clarify the intent of the FAA, a certificate holder or a foreign air carrier will be permitted to relocate an X-ray system that does not meet the new standard, and has therefore been replaced, to a lower category airport (i.e., an airport with lower screening activity as defined in FAA Order 1650.14, Aviation Security Handbook) or as approved by the Director of Civil Aviation Security and still meet the requirements in effect prior to July 22, 1985.

#### **Economic Impact**

The amendment relating to the language content of signs at X-ray system locations has no cost impact and will save passengers the cost of damaged film; therefore, the benefits, although not easily quantifiable, exceed the costs.

The amendment relating to improved testing of X-ray systems will impose an additional cost of about \$100 per new X-ray system for the step wedge device. In addition, the amendment will effectively prohibit the sale of used equipment that does not meet the new performance standards. About 15 percent of the 830 installed X-ray systems might not meet the new test standards, and of those about 25 percent might have been made available for sale as used equipment for up to \$10,000 per system. Therefore, the potential sales loss is estimated to be \$300,000 over a period of 5 to 10 years.

The benefits in terms of improved detection of forbidden items and the resultant reductions in hijackings and attendant casualty loss are difficult to quantify because they require estimating the number of forbidden items that would be detected by the new, but not the old, X-ray machines and the probabilities of such items being used in successful hijackings. Clearly, only one hijacking resulting in an accident need be prevented or, for that matter, only one life saved for the benefits to exceed the costs; therefore, it is the FAA's judgment that, on balance, the rule is beneficial.



### Conclusion

This amendment does not impose requirements that would result in any significant burden on the aviation community. Airport signs already contain the proposed language. The improved X-ray systems would impose a small additional cost of about \$100 per new X-ray system, and, in some cases, replaced equipment could not be resold for aircraft baggage inspection. The additional costs are far outweighed by saving passengers the cost of damaged film, improved detection of forbidden items, and the resultant reductions in hijackings and related costs. Further, the cost of an improved X-ray system would not be incurred until a new system is installed or the old system is replaced. For these reasons, and because there are no related cost savings to small entities, I certify that under the criteria of the Regulatory Flexibility Act, this amendment will not have a significant economic impact on a substantial number of small entities. In addition, for the same reasons, it has been determined that the amendment does not involve a major regulation under Executive Order 12291 and is not significant under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). A copy of the regulatory evaluation for this action is contained in the regulatory docket. A copy of it may be obtained by contacting the person identified under the caption "FOR FURTHER INFORMATION CONTACT."

### The Amendments

In consideration of the foregoing, §§ 108.17 and 129.26 of the Federal Aviation Regulations (14 CFR 108.17 and 129.26) are amended effective July 22, 1985.

*Authority:* Secs. 313, 315, 316, 317, 601, and 604, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354, 1356, 1357, 1358, 1421, and 1424); 49 U.S.C. 106(g) (Revised, Pub. L. 97-449, January 12, 1983).

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### Amendment 108-2

#### Transportation of Federal Air Marshals

**Adopted: July 3, 1985**

**Effective: July 8, 1985**

**(Published in 50 FR 27924, July 8, 1985)**

**SUMMARY:** This emergency regulation requires each certificate holder to whom the airplane operator security rules apply to carry Federal Air Marshals, in the number and manner specified by the Administrator, on designated scheduled and public charter passenger operations. This regulation is needed to respond to recent terrorist activity against U.S. civil aviation. It is intended to ensure that U.S. civil aviation and U.S. citizens are not impeded by international terrorism.

Comments must be received on or before August 11, 1985.

**ADDRESS:** Send comments on this proposal in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-204), Docket No. 24714, 800 Independence Avenue, SW., Washington, DC 20591; or deliver comments in duplicate to: Federal Aviation Administration Rules Docket, Room 916, 800 Independence Avenue, SW., Washington, DC 20591. Comments may be examined in the Rules Docket on weekdays, except Federal holidays, between 8:30 a.m. and 5:00 p.m.

**FOR FURTHER INFORMATION CONTACT:** Mr. John M. Hunter, Aviation Security Division (ACS-100), Office of Civil Aviation Security, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 426-8798.

docket and be submitted in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket, AGC-204, 800 Independence Avenue, SW., Washington, DC 20591. All communications received on or before August 11, 1985, will be considered by the Administrator, and this amendment may be changed in light of the comments received. All comments submitted will be available in the Rules Docket for examination by interested persons.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 24714." The postcard will be date and time stamped and returned to the commenter.

### **Background**

The June 14, 1985, hijacking of Trans World Airlines Flight 847 resulting in the murder and torture of U.S. citizens is the latest of a continuing series of terrorist attacks against U.S. aviation and U.S. interests, Government officials, and tourists in Europe and the Middle East during the 1980's. Accordingly, it has become necessary to undertake certain actions necessary to protect U.S. aviation in addition to those already mandated by part 108 of the Federal Aviation Regulations. To that end, the Secretary of Transportation has directed the FAA to undertake immediately certain actions necessary to protect U.S. airline flights in high-risk areas and to expand the FAA Federal Air Marshal Program to the extent necessary to ensure safety aboard U.S. air carriers traveling in all threatened areas.

The purpose of this final rule is to ensure that Federal Air Marshals are used effectively and efficiently aboard those high-risk flights that the Federal Aviation Administrator determines should be protected.

Federal officers were first used in the early 1960's to combat the initial spate of hijackings of U.S. aircraft to Cuba. Following the hijacking and destruction of four airliners in the Jordanian desert in 1970, "sky marshals" were used in significant numbers on threatened domestic and international flights. After the implementation of 100 percent passenger screening in 1970, their use in large numbers was considered unnecessary. Since then these Federal officers have been used from time to time when their special understanding of aviation security was needed to fulfill an inflight security function.

There have always been certain critical elements in the effective and efficient use of Federal Air Marshals. They include ensuring that marshals will be carried aboard those flights that intelligence information indicates are seriously threatened. This sometimes requires carriage with very short notice and the "bumping" of a passenger holding a reservation. Also critical to the effectiveness of the marshal is his or her location in the passenger cabin. It is important that the marshal or marshals be able to select their seats so that they may observe and respond to any incident.

This need for access to specific flights was recognized in 1970 when the Civil Aeronautics Board (CAB) adopted a rule requiring the free transportation of these officers. That rule is currently contained in §223.3 of Title 14 of the Code of Federal Regulations, which has been transferred from the CAB to the Department of Transportation (DOT) (50 FR 451; January 4, 1985). Section 223.3 provides that every air carrier shall carry, without charge, on any aircraft that it operates, among other persons, "security guards who have been assigned to the duty of guarding such aircraft against unlawful seizure, sabotage or other unlawful interference, upon the exhibition of such credentials as may be prescribed by the Administrator of the Federal Aviation Administration."

Section 223.3 has not been completely successful in meeting the need to properly position marshals. Some air carriers have denied seating to marshals to accommodate full-fare passengers. "Dead heading" marshals, who need to reposition themselves for immediate reassignment, are not expressly covered by the rule. Finally, it does not require the carrier to assign the marshal the seat he or she selects.

### **The Final Rule**

New §108.14 provides that each certificate holder shall carry Federal Air Marshals, in the number and manner specified by the Administrator, on each scheduled passenger operation and public charter

transportation to a confirmed passenger. The FAA will make every effort to avoid such a situation.

Sections 108.14(b) and (c) make it clear that on designated flights marshals must be carried on a first priority basis and be assigned a seat selected by the marshal. While the marshal may have some flexibility in accepting certain seating, the final decision as to seat selection must be made by the marshal.

Finally, § 108.14 restates the provision in § 223.3 that transportation of Federal Air Marshals while on duty shall be without charge.

#### **Need for Immediate Adoption**

Because of the need to respond immediately to the heightened threat to aviation safety from terrorist hijacking and sabotage of international flights, I find that notice and public procedure are impracticable and contrary to the public interest, and that good cause exists for making this amendment effective in less than 30 days.

#### **Economic Assessment**

Because of the emergency need for this regulation, no regulatory evaluation has been prepared. In accordance with section 11(a) of the Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979), a regulatory evaluation will be prepared and placed in the public docket, unless an exception is granted by the Secretary of Transportation. For this reason and in accordance with section 8(a)(1) of Executive Order 12291, I find that following the procedures of that Executive Order is impracticable.

Because none of the certificate holders affected by this regulation is a small entity, this regulation will not have a significant economic impact on a substantial number of small entities.

#### **Conclusion**

In accordance with section 8(a)(1) of Executive Order 12291, because of the emergency need for this regulation, the procedures in that Executive Order have not been followed. In view of the substantial public interest in the matter of aviation security as a result of the current threat situation, this regulation is considered significant under the Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Since no small entities will be affected by the proposed rule, it is certified that, under the criteria of the Regulatory Flexibility Act, the rule will not have a significant economic impact on a substantial number of entities. A copy of the regulatory evaluation to be prepared for this project will be placed in the public docket, unless an exception is granted by the Secretary of Transportation.

#### **The Amendment**

Accordingly, part 108 of the Federal Aviation Regulations (14 CFR part 108) is amended, effective July 8, 1985.

*Authority:* 49 U.S.C. 1354, 1356, 1357, 1358, 1421, and 1424; 49 U.S.C. 106(g) (revised, Pub. L. 97-449, January 12, 1983).

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Security Coordinators for international and domestic flights, in accordance with its approved security program. It also requires certificate holders to provide security training for all crewmembers to the extent necessary to prepare each crewmember to respond adequately to various levels and types of threats. This regulation is needed to respond to recent terrorist attacks against U.S. civil aviation. It is intended to protect U.S. civil aviation against international terrorism.

Section 108.27 does not become effective until notice of approval of the reporting requirement therein by the Office of Management and Budget is published in the *Federal Register*. Comments must be received on or before August 30, 1985.

**ADDRESSES:** Send comments on this amendment in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-204), Docket No. 24719, 800 Independence Avenue, SW., Washington, DC 20591; or deliver comments in duplicate to: Federal Aviation Administration, Rules Docket, Room 916, 800 Independence Avenue, SW., Washington, DC 20591. Comments may be examined in the Rules Docket on weekdays, except Federal holidays, between 8:30 a.m. and 5:00 p.m.

**FOR FURTHER INFORMATION CONTACT:** Mr. Donnie Blazer, Aviation Security Division (ACS-100), Office of Civil Aviation Security, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 426-8798.

#### **SUPPLEMENTARY INFORMATION:**

##### **Comments Invited**

Because of the emergency need for this amendment, it is being adopted without notice and public comment. However, the Department of Transportation (DOT) Regulatory Policies and Procedures (44 FR 11034; February 26, 1979) provide that, to the maximum extent possible, DOT operating administrations should provide notice and an opportunity for the public to comment on such emergency regulations after their issuance. Accordingly, interested persons are invited to comment on this final rule by submitting such written data, views, or arguments as they may desire. Communications should identify the regulatory docket and be submitted in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket, AGC-204, Docket No. 24719, 800 Independence Avenue, SW., Washington, DC 20591. All comments submitted will be available in the Rules Docket for examination by interested persons. This amendment may be changed in light of the comments received.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 24719." The postcard will be date and time stamped and returned to the commenter.

##### **Background**

The June 14, 1985, hijacking of Trans World Airlines Flight 847 resulting in the murder, torture, and kidnapping of U.S. citizens is the latest in a continuing series of terrorist attacks against U.S. aviation and U.S. interests, Government officials, and tourists in Europe, the Middle East, and throughout the world during the 1980's. Accordingly, it has become necessary to undertake certain actions to protect U.S. aviation in addition to those already mandated by part 108 of the Federal Aviation Regulations. To that end, it is necessary that the FAA immediately undertake certain actions to protect U.S. civil aviation and U.S. citizens in high-risk areas and throughout the world.

##### **Security Coordination**

One action effected by this amendment is to enhance the coordination and supervision of the security provided for domestic and international flights. In view of the current level of threat, this amendment requires each certificate holder to whom the airplane operator security rules apply to provide a ground

inflight Security Coordinator will also be specified in the security program and will include: (1) Reviewing, with the ground Security Coordinator, pertinent security information for the specific flight; (2) prior to beginning a flight or a series of flights with a particular crew, briefing the crew on the specific manner in which the PIC wants inflight incidents to be managed; (3) prior to each flight segment, briefing the crew on any significant irregularities or occurrences that may affect the security of the flight; and (4) on completion of a flight or series of flights, briefing the certificate holder on any significant incidents or occurrences, in accordance with the procedures established by the certificate holder.

New § 108.23(a) requires that each designated Security Coordinator satisfactorily complete the training as specified in the certificate holder's approved security program, within the preceding 12 calendar months. New § 108.7(b)(7) requires the curriculum for all required security training for ground and inflight Security Coordinators to be specified in the certificate holder's approved security program which is approved by the Principal Security Inspector. Based on the present level of threat, the air carrier's security program will require a maximum of 40 hours of initial training, as well as a minimum of 8 hours of annual recurrent training, for the ground Security Coordinator.

Pilots in command designated as inflight Security Coordinators will receive substantial training on inflight Security Coordinator duties during initial and recurrent training. As with other crewmembers, the pilot in command will be required to receive a minimum of 8 hours of initial training, including training directed at the functions and responsibilities of the inflight Security Coordinators, as well as annual recurrent training.

### **Crewmember Security Training**

The second action considered essential is to provide all crewmembers with expanded security training. In particular, this amendment will result in all air carrier crewmembers having a significantly increased capability of responding to hijack attempts and other criminal acts. To that end, significantly enhanced initial and recurrent training is being required for crewmembers.

New § 108.23(b) prohibits the use by a certificate holder of any person as a crewmember unless, within the preceding 12 calendar months, that person has satisfactorily completed the training as specified in the certificate holder's approved security program. All required security training for crewmembers must be specified in the certificate holder's approved security program and integrated in the certificate holder's approved training program which is approved by the Principal Operations Inspector in coordination with the Principal Security Inspector. For the crewmember training provisions of an air carrier security program to be approved by the FAA, the training program must provide 8 hours of initial security training, as well as annual recurrent training. Where the trainee is to act as pilot in command, this training will include significant emphasis on Security Coordinator duties and responsibilities. Each certificate holder is required to submit a separate curriculum for each type of training.

### **Evidence of Compliance**

In order to ensure effective compliance with these amendments and other provisions, new § 108.27 provides that, on request of the Administrator, each certificate holder shall provide evidence of compliance with this part and its approved security program. In accordance with the Paperwork Reduction Act of 1980 (P.L. 96-511), this new reporting provision will be submitted for approval to the Office of Management and Budget (OMB). New § 108.27 will not become effective until OMB approval has been received and notice of that approval is published in the *Federal Register*. Comments on this provision should be submitted to the Office of Information and Regulatory Affairs (OMB), New Executive Office Building, Room 3001, Washington, DC 20503; Attention: FAA Desk Officer (Telephone: (202) 395-7313). A copy should be submitted to the FAA Docket.

docket, unless an exception is granted by the Secretary of Transportation. For this same reason and in accordance with section 8(a)(1) of Executive Order 12291, I find that following the procedures of that Executive Order is impracticable.

### **Conclusion**

In accordance with section 8(a)(1) of Executive Order 12291, because of the emergency need for this regulation, the procedures in that Executive Order have not been followed. In view of the substantial public interest in the matter of aviation security as a result of the current threat situation, this regulation is considered significant under the Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). A copy of the regulatory evaluation to be prepared for this project will be placed in the public docket, unless an exception is granted by the Secretary of Transportation.

### **The Amendment**

Accordingly, part 108 of the Federal Aviation Regulations (14 CFR part 108) is amended effective July 11, 1985.

*Authority:* 49 U.S.C. 1354, 1356, 1357, 1358, 1421, and 1424, 49 U.S.C. 106(g) (revised, Pub. L. 97-449, January 12, 1983).

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### **Amendment 108-4**

#### **Airport and Airplane Operator Security Rules**

**Adopted: January 3, 1986**

**Effective: January 10, 1986**

**(Published in 51 FR 1350, January 10, 1986)**

**SUMMARY:** This final rule makes a number of minor substantive and editorial changes in the airport and airplane operator security rules regarding the carrying of an explosive, an incendiary, or a deadly or dangerous weapon and the entry of persons into sterile areas. They are needed to provide consistency within the rules and to ensure that the rules are given their intended effect. These amendments are being adopted to further enhance airport and air carrier security in response to the current heightened threat to U.S. civil aviation throughout the world.

Comments must be received on or before February 10, 1986.

**ADDRESSES:** Send comments on this amendment in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-204), Docket No. 24883, 800 Independence Avenue, SW., Washington, DC 20591; or deliver comments in duplicate to: Federal Aviation Administration, Rules Docket, Room 916, 800 Independence Avenue, SW., Washington, DC 20591. Comments may be examined in the Rules Docket on weekdays, except Federal holidays, between 8:30 a.m. and 5 p.m.

**FOR FURTHER INFORMATION CONTACT:** Mr. Donnie Blazer, Aviation Security Division (ACS-100), Office of Civil Aviation Security, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 426-8798.

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

These regulations are being adopted without notice and public comment. However, the Regulatory Policies and Procedures of the Department of Transportation (DOT) (44 FR 11034; February 26, 1979)

### **Background**

The June 14, 1985, hijacking of Trans World Airlines Flight 847 resulted in the torture and kidnapping of U.S. citizens and the murder of one U.S. citizen. It was one of the latest in a continuing series of terrorist attacks against U.S. aviation and U.S. interests, Government officials, and tourists in Europe, the Middle East, and throughout the world during the 1980's. To combat this threat, the FAA undertook certain actions to protect U.S. civil aviation and U.S. citizens in designated areas and throughout the world.

On July 3, 1985, the FAA issued Amendment No. 108-2 (50 FR 27924; July 8, 1985) providing for the transportation of Federal Air Marshals, in the number and manner specified by the Administrator, on designated scheduled and public charter passenger operations. The purpose of that rule is to ensure that Federal Air Marshals are used effectively and efficiently for those high-risk flights that the Federal Aviation Administrator determines should be protected.

On July 11, 1985, the FAA issued Amendment No. 108-3 (50 FR 28892; July 16, 1985) requiring each certificate holder to whom the airplane operator security rules apply to have individuals identified and trained as Security Coordinators for international and domestic flights, in accordance with its approved security program. It also required certificate holders to provide security training for all crewmembers to the extent necessary to prepare each crewmember to respond adequately to various levels and types of threats.

This final rule is being issued to make a number of minor changes to parts 107 and 108 of the Federal Aviation Regulations (FAR) that will provide consistency within the rules and ensure that they are given their intended effect.

### **Submission to Screening**

For the most part, the general public now accepts the screening of their person and carry-on articles as a minor inconvenience. They view it as a small price to pay for the security of their persons while flying. Nonpassengers entering a sterile area generally understand that they too must be screened in order to ensure the security of the area.

There have been instances, however, in which nonpassengers have refused to be screened and intentionally entered a sterile area. Even when these persons turn out to be unarmed and have no intention of hijacking or sabotaging an aircraft, their presence requires an appropriate security response. That need to respond disrupts the orderly conduct of passenger screening and requires the diversion of security personnel from other duties. Should another incident constituting a genuine security threat occur at the same time, the ability to respond could be seriously compromised.

To prevent such occurrences, part 107 is being amended to add a new § 107.20 that provides that no person may enter a sterile area without submitting to the screening of his or her person and property in accordance with the procedures being applied to control access to that area by a U.S. air carrier under § 108.9 or a foreign air carrier under § 129.25. Persons violating this prohibition would be subject to a civil penalty of \$1,000 for each violation.

### **Deadly or Dangerous Weapon**

Section 107.21 provides that, with certain exceptions, no person may have a firearm, an explosive, or an incendiary device on or about the individual's person or accessible property when presenting himself or herself for screening or when entering or in a sterile area. It states precisely the point at which a person may not have a prohibited item in his or her possession.

They would include such items as mace and certain knives. The passenger, however, already is prohibited from carrying any deadly or dangerous weapon on board the aircraft under § 108.11.

### **Incendiary Devices**

Parts 107 and 108 currently prohibit the possession of an incendiary device while passing through the screening point, in a sterile area, or aboard the airplane. An “incendiary device” is generally considered to be anything which can cause a fire by ignition. An incendiary, such as gasoline, whether or not a means of ignition is attached to it, has been considered an incendiary “device” for purposes of the rule because cigarette lighters and other ignition sources are readily available. To avoid too narrow an interpretation of the rule, “incendiary device” is being replaced by “incendiary” wherever the phrase appears in part 107 and part 108.

### **Applicability of Part 108**

A number of provisions in part 108 apply to passengers and to certain persons on airports. Section 108.11(a) and (b) prohibit the carriage of a deadly or dangerous weapon on or about the person of a passenger aboard an airplane unless certain conditions are met. This prohibition specifically applies to a certificate holder in the conduct of an operation with an airplane for which security screening is required by part 108. The prohibition applies to passengers aboard airplanes for which screening is required and also to passengers on airplanes for which screening is not required. In the latter case, the rule does not apply to the certificate holder since it does not screen passengers.

Section 108.11(c) prohibits certificate holders from transporting, and passengers from tendering for transport, in checked baggage any explosive, incendiary device, or loaded firearm. An unloaded firearm may be tendered for transport and transported, if the conditions in § 108.11(d) are met.

Section 108.21 prescribes requirements for the carriage of passengers under the control of armed law enforcement escorts. In addition to requirements imposed on the certificate holder, paragraph (c) of the section requires the law enforcement officer at all times to accompany and keep under surveillance the escorted person while aboard the airplane. Paragraph (d) prohibits the law enforcement escort and any passenger under his or her control from drinking any alcoholic beverage while aboard the airplane.

It is clear on the face of these provisions that they apply to persons aboard airplanes being operated by certificate holders, not just to certificate holders themselves, and to persons at airports where operations by certificate holders are being conducted. However, the general statement of the applicability of part 108 (§ 108.1) does not include reference to these persons. To remedy this editorial oversight, this section is being amended to state that the part applies not only to certificate holders, but also to persons aboard their airplanes and at airports where certificate holders conduct their operations.

### **Editorial Correction**

This final amendment replaces the reference in § 107.21 to former § 121.585. This reference should have been replaced with § 108.11 when part 108 was adopted.

### **Need for Immediate Adoption**

These amendments are needed to ensure the overall effectiveness of the aviation security regulations in a time of heightened threat. The minor substantive changes conform to the general public understanding of the meaning and purpose of security screening requirements. The current behavior of the public and certificate holders already conforms to these changes. Other changes are of an editorial nature.

For these reasons, notice and public procedure are impracticable, unnecessary, and contrary to the public interest, and good cause exists for making this amendment effective in less than 30 days. Moreover, publication for prior comment would not reasonably be expected to result in the receipt of useful information



These amendments are not expected to change the behavior patterns of passengers and other persons on airports who comply with them or to impose any additional burdens. Therefore, the FAA has determined that this amendment involves a regulation which is not major under Executive Order 12291 or significant under the Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). For this same reason, it is certified that this amendment will not have a significant economic impact, positive or negative, on a substantial number of small entities. Because of the absence of any costs connected with the proposal, the FAA has determined that the expected impact on the amendment is so minimal that it does not warrant an evaluation.

### **The Amendment**

Accordingly, parts 107 and 108 of the Federal Aviation Regulations (14 CFR parts 107 and 108) are amended effective January 10, 1986.

*Authority:* 49 U.S.C. 1354, 1356, 1357, 1358, and 1421, 1424, and 1511; 49 U.S.C. 106(g) (revised, Pub. L. 97-449, January 12, 1983).

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### **Amendment 108-3A**

#### **Announcement of Effective Date of § 108.27**

#### **Evidence of Compliance with Security Programs**

**Adopted: December 3, 1986**

**Effective: December 12, 1986**

**(Published in 51 FR 44875, December 12, 1986)**

**SUMMARY:** This notice announces the effective date of the Federal Aviation Regulation that requires certificate holders to provide evidence of compliance with the airplane operator security rules and their approved security programs. This new reporting requirement is needed to ensure that all certificate holders provide FAA Security Inspectors access to information that will demonstrate compliance. It can now become effective because approval has been received from the Office of Management and Budget.

**FOR FURTHER INFORMATION CONTACT:** Mr. Donnie Blazer, Civil Aviation Security Division (ACS-100), Office of Civil Aviation Security, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-8701.

#### **SUPPLEMENTARY INFORMATION:**

##### **Background**

On July 16, 1985, a final rule was published, amending part 108 of the Federal Aviation Regulations (50 FR 28892; Amdt. No. 108-3). This rule adopted a new § 108.27, which provides that, on request of the Administrator, each certificate holder shall provide evidence of compliance with part 108 and the certificate holder's approved security program. The section seeks to ensure effective compliance with, among other things, the training requirements added to part 108 by Amendment 108-3. In accordance with the Paperwork Reduction Act of 1980 (Pub. L. 96-511), the new reporting provision was submitted for approval to the Office of Management and Budget (OMB). The Final Rule stated that § 108.27 would not become effective until OMB approval was received and notice of that approval was published in the *Federal Register*.

consistent with that "traditionally used by the FAA to enforce certificate holder compliance with other parts of the Federal Aviation Regulations." The ATA suggests that "the potential administrative and paperwork burdens on both certificate holders and the FAA could be enormous without any redeeming compliance benefits."

The FAA has considered ATA's comments on new § 108.27. The FAA continues to believe, however, that in an age of heightened terrorism, this reporting requirement is necessary to ensure the highest level of safety in air transportation for Americans, in accordance with the Federal Aviation Act of 1958. The provision is not intended to be a harbinger of a change in FAA enforcement practice. In the past, the FAA has routinely examined certificate holders' training records and other evidence of compliance with the security requirements of part 108. For the most part, certificate holders have cooperated with FAA Civil Aviation Security Inspectors, showing their willingness to ensure the effective implementation of required security measures and to demonstrate their own dedication to combatting the current threat of terrorism. The size and complexity of the current security effort make this cooperation essential for the FAA's performance of its role in aviation security. Section 108.27 is intended to provide a sanction for the small number of persons who would impede the task of monitoring that effort. It is not expected to result in an increased burden on either part 108 certificate holders or the FAA.

#### **Immediate Effective Date**

In view of the fact that new § 108.27 was published on July 16, 1985, and that the need to ensure effective compliance with part 108 continues under the undiminished threat of terrorism to civil aviation, § 108.27 is being made effective December 12, 1986.

The FAA has determined that the term "firearm" in § 107.21 should be replaced with "deadly or dangerous weapon," in order to be consistent with the terminology that is used elsewhere in the security regulations. Accordingly, § 107.21 is being amended to prohibit passengers from presenting themselves for screening with a deadly or dangerous weapon accessible to them. The effect of this amendment will be to broaden the rule to prohibit certain items at the screening point in addition to firearms. They would include such items as mace and certain knives. The passenger, however, already is prohibited from carrying any deadly or dangerous weapon on board the aircraft under § 108.11.

#### **Incendiary Devices**

Parts 107 and 108 currently prohibit the possession of an incendiary device while passing through the screening point, in a sterile area, or aboard the airplane. An "incendiary device" is generally considered to be anything which can cause a fire by ignition. An incendiary, such as gasoline, whether or not a means of ignition is attached to it, has been considered an incendiary "device" for purposes of the rule because cigarette lighters and other ignition sources are readily available. To avoid too narrow an interpretation of the rule, "incendiary device" is being replaced by "incendiary" wherever the phrase appears in part 107 and part 108.

#### **Applicability of Part 108**

A number of provisions in part 108 apply to passengers and to certain persons on airports. Section 108.11 (a) and (b) prohibit the carriage of a deadly or dangerous weapon on or about the person of a passenger aboard an airplane unless certain conditions are met. This prohibition specifically applies to a certificate holder in the conduct of an operation with an airplane for which security screening is required by part 108. The prohibition applies to passengers aboard airplanes for which screening is required and also to passengers on airplanes for which screening is not required. In the latter case, the rule does not apply to the certificate holder since it does not screen passengers.

Section 108.11(c) prohibits certificate holders from transporting, and passengers from tendering for transport, in checked baggage any explosive, incendiary device, or loaded firearm. An unloaded firearm may be tendered for transport and transported, if the conditions in § 108.11(d) are met.

their airplanes and at airports where certificate holders conduct their operations.

### **Editorial Correction**

This final amendment replaces the reference in § 107.21 to former § 121.585. This reference should have been replaced with § 108.11 when part 108 was adopted.

### **Need for Immediate Adoption**

These amendments are needed to ensure the overall effectiveness of the aviation security regulations in a time of heightened threat. The minor substantive changes conform to the general public understanding of the meaning and purpose of security screening requirements. The current behavior of the public and certificate holders already conforms to these changes. Other changes are of an editorial nature.

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## **Amendment 108-5**

### **Airplane Operator and Foreign Air Carrier Security Rules**

**Adopted: December 18, 1987**

**Effective: December 21, 1987**

**(Published in 52 FR 48508, December 22, 1987)**

**SUMMARY:** This final rule requires the application of certain security procedures to all persons entering an airport sterile area in the United States at a preboarding screening check point. These procedures are designed to prevent or deter the carriage aboard aircraft of explosives, incendiaries, and deadly or dangerous weapons. These amendments are intended to limit the application of special procedures that have allowed certain classes of individuals to enter sterile areas through screening points without inspection of their persons and accessible property. They are needed to respond to a threat to aviation security highlighted by the recent crash of an air carrier aircraft with the loss of 44 lives.

Comments must be received on or before February 21, 1988.

**ADDRESS:** Send comments on this final rule in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn.: Rules Docket (AGC-204), Docket No. 25502, 800 Independence Avenue, SW., Washington, DC 20591; or deliver comments in duplicate to: Federal Aviation Administration Rules Docket, Room 916, 800 Independence Avenue, SW., Washington, DC 20591. Comments must be marked Docket No. 25502. Comments may be examined in the Rules Docket on weekdays, except Federal holidays, between 8:30 a.m. and 5:00 p.m.

**FOR FURTHER INFORMATION CONTACT:** Mr. Donnie Blazer, Domestic Civil Aviation Security Division, Office of Civil Aviation Security, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone: (202) 267-8058.

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

Because of the emergency need for this regulation, it is being adopted without notice and public comment. However, the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034; February 26, 1979) provide that, to the maximum extent possible, DOT operating administrations should provide an opportunity for public comment, after issuance, for regulations issued without prior notice. Accordingly, interested persons are invited to comment on this final rule by submitting such written data, views, or arguments as they may desire. Communications should identify the regulatory

Part 108 of the Federal Aviation Regulations requires each certificate holder required to conduct security screening to prevent or deter the carriage aboard its airplanes of any explosive, incendiary, or deadly or dangerous weapon on or about any individual's person or accessible property. The certificate holder must use the procedures included, and the facilities and equipment described, in its security program approved by the FAA for this purpose. Similar requirements in part 129 apply to foreign air carriers landing or taking off in the United States.

Under the security screening procedures adopted by U.S. certificate holders and foreign air carriers in their required security programs, employees of the airport and air carriers and other classes of individuals, including law enforcement officials, have been permitted to pass through airport screening points under special procedures. Under these programs, many of these individuals have not been required to submit to the inspection of their persons or accessible property. The FAA did not regard these classes of individuals as a risk to aviation security when they were properly identified and the special procedures were correctly applied.

Recent events have caused concern over the proper application of these procedures. On December 7, 1987, Pacific Southwest Airlines Flight 1771 apparently was caused to crash by an individual who had smuggled a gun aboard the aircraft. Forty-four persons lost their lives in this incident. While it is not yet clearly established whether the perpetrator of this crime used an air carrier employee identification card to avoid inspection of this person and property, the incident raises questions about the applicability of the screening process to airport and airline employees. Clearly proper application of the special screening procedures should prevent any unauthorized airport or airline employee from avoiding inspection of his or her person and accessible property. The FAA is particularly concerned that individuals, using real or forged identification, may attempt to similarly compromise the screening system. To ensure maximum protection of all of those involved in aviation and restore public confidence in the aviation security system, the FAA is adopting immediately rules to remove this possible abuse of the screening system.

These amendments to parts 108 and 129 provide that all individuals who enter an airport sterile at each preboarding screening checkpoint in the United States must be inspected using procedures, facilities, and equipment designed to detect explosives, incendiaries, and deadly or dangerous weapons. In addition, all accessible property under that person's control must be inspected. These inspection procedures will be applied to all airport and airline employees. Only limited exceptions will be authorized by the Administrator.

These emergency amendments apply only to operations of certificate holders and foreign air carriers in the United States. They apply to screening at each checkpoint in the United States for which the certificate holder or foreign air carrier is responsible, even if the screening of its passengers at a specific checkpoint is conducted by another operator.

#### **Reason for No Notice and Immediate Adoption**

These amendments are needed immediately to ensure the overall effectiveness of the aviation security regulations to meet this particular threat. For this reason, notice and public procedure are impracticable, and good cause exists for making this amendment effective in less than 30 days. In accordance with DOT Regulatory Policies and Procedures, an opportunity for public comment after publication is being provided.

#### **Economic Assessment**

Because of the emergency need for this regulation and in accordance with section 8(a)(1) of Executive Order 12291, I find that following the procedures of that Executive Order is impracticable. For the same reason, no regulatory evaluation has been prepared prior to publication of this final rule. In accordance with section 11(a) of the Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979), a regulatory evaluation will be prepared and placed in the public docket, unless an exception is granted by the Secretary of Transportation.

to individuals is minimal, it is certified that these amendments will not have a significant economic impact on a substantial number of small entities. A copy of the regulatory evaluation to be prepared for these amendments will be placed in the public docket, unless an exception is granted by the Secretary of Transportation.

### **The Amendment**

Accordingly, parts 108 and 129 of the Federal Aviation Regulations (14 CFR parts 108 and 129) are amended effective December 21, 1987.

*Authority:* The authority citation for part 108 continues to read as follows: 49 U.S.C. 1354, 1356, 1357, 1358, 1421, and 1424; 49 U.S.C. 106(g) (Revised, Pub. L. 97-449, January 12, 1983).

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### **Amendment 108-6**

#### **Security Directives and Information Circulars**

**Adopted: July 6, 1989**

**Effective: July 10, 1989**

**(Published in 54 FR 28982, July 10, 1989)**

**SUMMARY:** This final rule provides for the issuance of Security Directives and Information Circulars to enable air carriers and the security community to coordinate responses to threats against civil aviation. This rule also requires mandatory compliance with the countermeasures prescribed in Security Directives and prohibits the release of the information contained in both Security Directives and Information Circulars to unauthorized persons. This action is necessary to simplify and expedite existing procedures, to ensure that appropriate officials take specific measures to counter terrorism directed at civil aviation, and to prohibit the unauthorized disclosure of sensitive security information. This regulation is intended to increase protection of passengers and crewmembers traveling in air transportation and air commerce.

**DATES:** Effective July 10, 1989. Comments must be submitted by August 9, 1989.

**ADDRESSES:** Comments on this final rule should be mailed or delivered, in triplicate, to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC-10), Room 915-G, Docket No. [25953], 800 Independence Ave. SW., Washington, DC 20591.

Comments may be examined in the Rules Docket, Room 915-G, weekdays (except Federal holidays) between 8:30 a.m. and 5:00 p.m.

**FOR FURTHER INFORMATION CONTACT:** Quinten T. Johnson, Civil Aviation Security Division (ACS-100), Office of Civil Aviation Security, Federal Aviation Administration, 800 Independence Ave. SW., Washington, DC 20591; telephone (202) 267-8058.

#### **SUPPLEMENTARY INFORMATION:**

##### **Background**

The dramatic increase in international terrorism since the 1970's has also affected civil aviation. The explosion and crash of Pan American World Airways (Pan Am) Flight 103 in Lockerbie, Scotland, in December 1988 illustrate the vulnerability of civil aviation to terrorist acts. The threat is both sophisticated and multifaceted.

of America, certain other Federal agencies, and FAA security personnel. In addition, the State Department transmitted the Security Bulletins to appropriate overseas posts. Upon receipt of the Security Bulletins, each air carrier's corporate security officer determined whether any further dissemination was necessary. Occasionally, the FAA included its own recommendations for specific actions. Although the FAA believes the air carriers have been responsive to the actions recommended by Security Bulletins, mandatory compliance requires amendments to the air carrier's overall security program.

The Civil Aviation Security Program, referenced in the Federal Aviation Regulations (FAR), was initiated in 1973. Part 108 of the FAR was promulgated in 1981 (46 FR 3782; January 15, 1981) and requires certain U.S. air carriers to adopt and use FAA-approved security programs to screen passengers and property, control access to airplanes and facilities, and prevent criminal acts against civil aviation. The FAA can amend an individual carrier's security program if it determines that there is an emergency requiring immediate action to protect safety in air transportation or air commerce (see § 108.25), and compliance with such amendments is mandatory. It is not customary, however, for the FAA to amend a carrier's overall security program with flight-specific, date-specific, or site-specific information. Information of this type has been distributed through the Security Bulletin system.

On April 3, 1989, Secretary of Transportation Samuel K. Skinner announced a number of aviation security initiatives to ensure protection of travelers on U.S. air carriers. Among these initiatives, and the subject of a separate rulemaking action, was the commitment to propose requiring the widespread deployment of explosives detection systems. Another initiative, the establishment of a mandatory Security Directive system, is the subject of this rulemaking action.

#### **Discussion of the Amendments**

When threats against civil aviation become known, it is crucial that the information and any appropriate countermeasures be disseminated as soon as possible to air carrier security personnel. A system that will allow the FAA to disseminate critical threat information and, when necessary, establish mandatory security countermeasures responsive to that threat in a single document, will improve and simplify the current process. In order to ensure that the wide variety of threats can be effectively countered, the FAA will issue two kinds of security alerts—Information Circulars and Security Directives.

Information Circulars will be used to notify U.S. air carriers of general situations for which FAA will not prescribe mandatory countermeasures. The purpose of Information Circulars will be to provide air carriers with general information relevant to civil aviation security.

Security Directives will be used to notify U.S. air carriers of information on specific credible threats that are limited by such factors as location, number or identity of carriers, method of attack, or duration of time. Security Directives will set forth mandatory countermeasures and will eliminate the need to amend the air carriers' ongoing security programs. Air carriers will be required to acknowledge receipt of Security Directives and to notify the FAA of how they implemented the countermeasures prescribed by the FAA. In unusual situations, such as when an air carrier is precluded from implementing the prescribed countermeasures, the air carrier shall submit alternative countermeasures for the approval of the Director of Civil Aviation Security. The air carrier is required to submit any proposed alternative measures within the time period specified in the Security Directive. Air carriers will also be required to distribute the information to the personnel specified in Security Directives and to others with an operational need to know. Personnel with an operational need to know are those personnel with security-related responsibilities for air transportation operations affected by the Security Directive. Such personnel could include the in-flight security coordinator (ISC) (pilot in command), the ground security coordinator (GSC), airline and airport security personnel, and Federal, State, or local law enforcement officials.

In order to protect the sensitive nature of Security Directives and Information Circulars, their availability will be restricted to air carriers and personnel with an operational need to know, and release of any information contained in them without the prior written authorization of the Director of Civil Aviation Security will be prohibited.

in a complete and uniform manner requires amendment of part 108 of the Federal Aviation Regulations. Because the general level of the threat to U.S. air carriers operating in air commerce and air transportation could rapidly increase, the FAA has determined that good cause exists to make this final rule effective in less than 30 days. In addition, this final rule is being adopted without prior notice and opportunity for public comment. For the reasons stated above and because immediate action is necessary to protect passengers and crewmembers traveling in air transportation, the FAA believes prior notice and opportunity for public comment are impracticable and, furthermore, are contrary to the public interest.

The Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034; February 26, 1979) provide that, to the maximum extent possible, operating administrations of the Department of Transportation (DOT) should provide an opportunity for public comment on regulations issued without prior notice. Thus, the FAA has provided a 30-period during which interested persons may comment on the final rule.

#### **Procedure for Submitting Comments**

In accordance with the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034, February 26, 1979), interested persons are invited to comment on this final rule by August 9, 1989. Comments should identify the regulatory docket number and be submitted in triplicate to the Rules Docket (see ADDRESSEES). Commenters wishing the FAA to acknowledge receipt of their comments must include a self-addressed, stamped postcard containing the following statement: "Comments to Docket No. 25953". All comments will be available for examination, both before and after the closing date, in the Rules Docket.

#### **Paperwork Reduction Act**

Information collection requirements in part 108 have previously been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (Pub. L. 96-511) and has been assigned OMB control number 2120-0098. The slight additional paperwork burden associated with § 108.18 was approved by OMB as an amendment to 2120-0098.

#### **Regulatory Evaluation Summary**

The following is a summary of the final cost impact and benefit assessment of a regulation amending FAR part 108, Airplane Operator Security, to require that U.S. air carrier operators comply with measures to counter terrorist threats against civil aviation as prescribed in FAA Security Directives. Under the new requirements, air carriers will be required to acknowledge receipt of Security Directives within the time specified, distribute Security Directives to the appropriate individuals, implement mandatory countermeasures as furnished by individuals, implement mandatory countermeasures as furnished by the FAA (or, in unusual situations, alternative countermeasures if approved by the Director of Civil Aviation Security), and report to the FAA on those actions taken to comply with the Security Directives.

The FAA has determined that these amendments will affect approximately 20 air carriers, including both scheduled air carriers and demand charter service air carriers. The major impact is expected to be on six of these air carriers with significant operations to the Middle East, Europe, and South Asia, since most of the threats pertain to these parts of the world. These air carriers will receive most of the Security Directives issued by the FAA. The remaining air carriers have infrequent service to these areas, and thus, are expected to receive and be required to process only a small share of the Security Directives issued. The regulatory evaluation prepared for this rule estimates that the total cost of compliance to the affected U.S. air carriers is \$48,260 in 1989 dollars; the present value of this amount is \$29,654 over a 10-year period using a discount rate of 10 percent.

The primary benefits of these amendments will be the prevention of potential fatalities, injuries, and property losses resulting from criminal acts and acts of terrorism perpetrated against domestic aviation interests. The FAA has not been able to quantitatively estimate the extent to which this rule will be

system is an essential part of, and integrally related to, achievement of the benefits of reduced fatalities, injuries, and property losses.

### **Regulatory Flexibility Determination**

The FAA has determined that, under the criteria of the Regulatory Flexibility Act (RFA), these amendments will not have a significant economic impact on a substantial number of small entities. The RFA requires agencies to specifically review rules that may have a "significant economic impact on a substantial number of small entities." None of the scheduled air carriers impacted by this rule are small entities. A portion of the charter air carriers which will be impacted by this rule are small entities. The estimated annual cost to these charter carriers from this regulation is \$127 per company. This is significantly less than the threshold for significant economic impact. Even if twice the number of Security Directives were issued to these small entities, the total cost would still be significantly less than the threshold. Accordingly, it is certified that the amendment to part 108 will not have a significant economic impact, positive or negative, on a substantial number of small entities and no further regulatory flexibility analysis is required.

### **Trade Impact Statement**

This rule is expected to have no impact on trade opportunities for either U.S. firms doing business overseas or foreign firms doing business in the United States. These amendments affect only certain domestic air carriers subject to part 108 of the FAR. Since the cost to these air carriers is small, there is expected to be no impact on trade opportunities for either U.S. firms overseas or foreign firms in the United States.

### **Federalism Implications**

The amendments contained in this final rule revise the manner by which the FAA communicates security information and mandatory procedures to U.S. air carriers. The FAA has determined that the final rule adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. In accordance with Executive Order 12612, the FAA has determined that this final rule does not have sufficient federalism implications to warrant preparation of a Federalism Assessment.

### **Conclusion**

For reasons discussed in the preamble, it is certified that this final rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. In addition, because the final rule will not result in an annual effect on the economy of \$100 million or more or result in a significant increase in consumer prices, the FAA has determined that the final rule is not a major rule under the criteria of Executive Order 12291. Since the final rule involves issues of substantial interest to the public, however, the FAA has determined that it is significant under the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034; February 26, 1979).

### **The Amendments**

In consideration of the foregoing, the Federal Aviation Administration amends part 108 of the Federal Aviation Regulations (14 CFR part 108) effective July 10, 1989.

The authority citation for part 108 continues to read as follows:

*Authority:* 49 U.S.C. 1354, 1356, 1357, 1358, 1421, 1424, and 1511; 49 U.S.C. 106(g) (revised, Pub. L. 97-449, January 12, 1983).

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rights in accordance with their respective approved security programs. This action is intended to protect passengers and crewmembers from acts of sabotage directed against civil aviation and is responsive to recent legislation.

**ADDRESSES:** The complete docket for this rule, including the Regulatory Impact Analysis, may be examined at the Federal Aviation Administration, Rules Docket (AGC-10), Room 915-G, 800 Independence Ave., SW., Washington, DC 20591, between 8:30 a.m. and 5 p.m. weekdays, except Federal holidays.

For copies of performance criteria and implementation procedures for explosives detection systems, prospective manufacturers may write to the Federal Aviation Administration, Director of Civil Aviation Security (Attn: ACS-200), 800 Independence Ave., SW., Washington, DC 20591.

**FOR FURTHER INFORMATION CONTACT:** Quinten T. Johnson, Civil Aviation Security Division (ACS-100), Office of Civil Aviation Security, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-8058.

## **SUPPLEMENTARY INFORMATION:**

### **Introduction**

On July 6, 1989, the Federal Aviation Administration (FAA) issued a Notice of Proposed Rulemaking (NPRM) to amend part 108 of the Federal Aviation Regulations (FAR) to require certain U.S. air carriers to use explosives detection systems (EDS's) to screen checked baggage on international flights in accordance with their respective security programs (54 FR 28985, July 10, 1989). This regulation was proposed on the FAA's own initiative and in response to legislation because attacks against international civil aviation have increased in sophistication over the past decade. In recent years, explosive devices have been used to damage or destroy civilian aircraft resulting in the loss of many lives. For example, 259 people on board Pan American World Airways (Pan Am) Flight 103 plus 11 people on the ground in Lockerbie, Scotland, were killed by an explosion aboard that flight in December 1988. As a result of such incidents, security has become a greater concern of the aviation community, and more sophisticated measures are required to prevent recurrences of such incidents. Therefore, the regulation requiring U.S. air carriers to use EDS's to screen checked baggage for international flights in accordance with their respective security programs is adopted as final.

### **Background**

FAR part 108, promulgated in 1981 (46 FR 3782, January 15, 1981), is part of the FAA's Civil Aviation Security Program initiated in 1973. Section 108.9 requires certain U.S. carriers to conduct security screening of passengers and their baggage "to prevent or deter the carriage aboard airplanes of any explosive, incendiary, or deadly or dangerous weapon on or about each individual's person or accessible property, and the carriage of any explosive or incendiary in checked baggage."

For many years, this screening program was effective in countering the threat to domestic and international civil aviation, which came primarily from hijackers. In recent years an additional threat has come from persons seeking to bomb or sabotage aircraft. To counter this threat, improved methods of detecting explosives are needed.

The U.S. Government has actively supported research and development in explosives detection. For example, between fiscal years 1982 and 1989, the FAA spent over \$47 million on vapor detection and thermal neutron analysis equipment alone. In February 1989, the International Civil Aviation Organization (ICAO) convened a special session of its Council to discuss acts of sabotage directed against civil aviation and the need to expedite research and development on the detection of explosives. In March 1989, the ICAO held a meeting of world experts in explosives detection to address the issue. Similar discussions have taken place in European organizations as well.

most significant of these was the deployment of explosives detection systems being addressed in this rule, and the establishment of a Security Directive and Information Circular system, for which a regulation was promulgated on July 10, 1989 (54 FR 28982, July 10, 1989).

There has also been substantial Congressional interest in improving aviation security. One Congressional response was legislation (Pub. L. 101-45), signed by the President on June 30, 1989, that directs the FAA to require EDS's at airports where the Administrator of the Federal Aviation Administration determines the use of EDS's is necessary. This legislation provided that—

Not later than thirty days after the date of the enactment of this Act, the Federal Aviation Administrator shall initiate action, including such rulemaking or other actions as necessary, to require the use of explosive detection equipment that meets minimum performance standards requiring application of technology equivalent to or better than thermal neutron analysis technology at such airports (whether located within or outside the United States) as the Administrator determines that the installation and use of such equipment is necessary to ensure the safety of air commerce. The Administrator shall complete these actions within sixty days of enactment of this Act[.]

#### **Discussion of the Proposed Regulation**

In its July 6, 1989, proposed rule, the FAA requested comments on three alternative plans for deploying EDS's. The alternatives identified in the NPRM were as follows:

I. *Domestic and International Alternative*—Install EDS's at 427 airports in the United States and 95 foreign airports over a 10-year phase-in period (100% checked baggage screening of domestic and U.S. International flights, eventually requiring 1,250 EDS's by 1999).

II. *International Alternative*—Install only enough EDS's to screen U.S. carrier international flights at domestic and foreign airports over a three year phase-in period (100% checked baggage screening of all U.S. International flights, eventually requiring 400 EDS's by 1999).

III. *Threat-Driven Alternative*—Install 200 EDS's at an unspecified number of domestic and foreign airports over a three year phase-in period, based on the need to counter threats (100% checked baggage screening of all international flights at selected airports, eventually requiring 270 EDS's by 1999).

The FAA stated that, while comments were welcome on the feasibility of all three alternatives, it was proposing Alternative II. It proposed that for international flights each air carrier conducting screening under an approved security program use an EDS that has been approved by the Administrator to screen checked baggage. This proposal would enable the FAA to require air carriers to use EDS's for all international flights.

Thus, in the proposed rule, the FAA sought the authority to require EDS's for all international operations through subsequent amendments to each air carrier's security program, although initial deployment of EDS's would be limited to approximately 40 airports. The FAA stated that before extending EDS requirements to international locations beyond the initial deployment, it would consider a variety of factors such as successful consultation with foreign governments, level of vulnerability at the particular location, and the projected level of usage. The FAA also stated that it would look closely at benefits and costs.

#### **Discussion of Comments**

The FAA received comments from 28 individuals and organizations. Although the proposed rule addressed only the screening of international baggage, the FAA also invited comments on the feasibility of either requiring EDS's for domestic operations or requiring EDS's on a threat-driven basis. Several other issues were also raised by commenters, the major points of which are discussed below.

### Threat-Driven Approach

Some commenters believe that the practice of using EDS's only where known threats exist would satisfy the Congressional mandate in Public Law 101-45 and that carrier flights not operating from high threat locations would then be spared the expense of using an EDS to screen checked baggage. One commenter said that if terrorists didn't know where EDS's are, this approach would deter criminal acts. Other commenters said that the FAA should use mobile EDS's to counter site- or time-specific threats. The FAA believes that the value of widescale use of EDS's is in their general deterrence and not simply in response to specific threats. Moreover, the FAA does not believe it is presently feasible to employ mobile EDS's because of the large size of the EDS equipment currently available and because of the long lead times needed to acquire, install, and operate EDS's. However, as indicated elsewhere in this preamble, the FAA will carefully evaluate where to require the use of EDS's.

### Cost

Some commenters believe that the FAA underestimated the costs of acquiring and operating EDS's. While some comments could not be evaluated because of lack of supporting data on underlying assumptions, the FAA acknowledges that a number of points raised by the comments are valid and has made adjustments in the cost estimates. The final rule cost estimates are considerably higher than those identified in the NPRM. The revised cost estimates, addressing such factors as cost of structures to house EDS's, number of systems needed, operator training, and maintenance are discussed later in this preamble under "Regulatory Impact Analysis Summary." The Regulatory Impact Analysis, not published in the *Federal Register*, is part of the docket for this rule and contains a thorough analysis of costs. It may be examined at the location stated under ADDRESSES.

Some commenters express the opinion that the Government should fund implementation of this regulation since, they said, the U.S. Government, not the air carriers, is actually the terrorists' target. The FAA does not agree with commenters who say that the Government should fund EDS's. The FAA notes that the Federal government does not currently fund implementation of other mandatory security programs. The FAA recognizes that this rule will have a cost impact on air carriers, but it is projected to be modest on a per-passenger basis, and the FAA expects air carriers to recover the cost as they would other operational costs.

One commenter expresses concern that small carriers would be competitively disadvantaged in foreign operations if they had to pay for EDS equipment. Furthermore, the commenter points out that the larger carriers would be so overwhelmed by screening their own baggage that they would not be able to serve small carriers. The FAA recognizes that cooperation among air carriers in the use of available EDS equipment is critical to minimize costs and maximize EDS use. The FAA's cost estimates are predicated on cooperation that allows for maximum utilization of EDS equipment. Shared use of EDS equipment is also necessary to permit carriers with relatively low passenger volume from a given location to be competitive. It is expected that, as with other security equipment in the past, air carriers will enter into agreements among themselves to achieve shared use of EDS equipment. If unforeseen problems arise in specific situations, the FAA will work with the carrier involved to address appropriate checked baggage screening procedures.

One commenter suggests that foreign carriers should also be covered by this regulation since many Americans travel on foreign carriers. These travelers, the commenter said, should receive the same protection as those on U.S. carriers. The FAA believes that the aviation security threat is directed primarily at U.S. air carriers and not U.S. citizens per se. Should this situation change, the FAA will reconsider the applicability of the rule. Furthermore, it is important to work through the International Civil Aviation Organization to achieve unified, coordinated, worldwide improvements in aviation security. To this end the FAA is actively working with the member states of ICAO to prevent and deter threats against all of civil aviation.

that can meet the performance criteria. Several commenters express concern that the TNA system is not ready for operational use and is being deployed too rapidly.

Not only has Congress directed the FAA to require explosives detection equipment, the FAA believes there is an urgent need to establish such requirements. The FAA decided to purchase TNA systems because, after operational testing, the TNA system proved to have the highest degree of explosives detection capability currently available. It is the FAA's belief that by implementing the first generation of EDS technology, it is creating an incentive for manufacturers to make technological advances and produce smaller, less costly equipment. Although one commenter advises the FAA to be certain that vendors will be able to produce EDS equipment quickly enough to meet any deployment schedules that may be established through amendments to air carriers' security programs, the FAA believes, based on consultation with the manufacturer of TNA, that there will be an adequate supply of machines. Also, deployment schedules will be subject to the manufacturers' ability to produce the equipment. The FAA recognizes that other systems are in development and welcomes the opportunity to test and approve them when they meet the performance criteria established by the Administrator. The phased-in implementation of EDS technology will facilitate further research and development of alternatives.

The FAA has established the following minimum performance criteria for all EDS's:

1. The systems must be automated.
2. They must detect defined quantities and configurations of FAA-defined explosives.
3. They must be safe for operators and baggage.

Some commenters remark that the FAA should have spelled-out the performance criteria and described the method by which the Administrator will approve EDS technology. The rule, however, is not the means by which a manufacturer's equipment is approved; it is an enablement of the FAA to require EDS's. More detailed information about the capabilities, use, compliance dates, locations, and deployment schedules of the system will be incorporated into each air carrier's approved security program. Specific performance criteria will be made available to manufacturers upon request. However, in accordance with § 191.5 of the FAR, the FAA will not publish this information in any document generally available to the public. The Director of Civil Aviation Security has determined that disclosure of this information would be detrimental to the safety of the traveling public. For the same reasons, the specific locations and numbers of EDS units will not be made available to the public. Persons with an operational need to know may write to the Federal Aviation Administration, Director of Civil Aviation Security (Attn: ACS-200), 800 Independence Ave., SW., Washington, DC 20591, for further information.

Another issue raised by commenters is the ability to set TNA equipment to detect small enough levels of explosives to adequately ensure passenger safety. The current performance criteria are reflective of the amounts of various explosives which have been determined to pose a threat.

One commenter points out that the size of the opening on the FAA-purchased TNA precludes oversized bags. It should be noted, however, that the vast majority of passenger bags do fit into the opening of the TNA equipment, and air carriers may contract for different machines with larger openings if they wish. The FAA will address screening procedures for oversize bags in connection with the air carriers' security programs.

#### **Alarm Resolution**

Concern has been expressed over how alarms will be handled and the amount of time it will take to clear suspect baggage. Procedures that will take into account the type of threat, limitations on terminal facilities, availability of law enforcement personnel, and explosives ordnance disposal support will be required under each air carrier's security program. While alarm resolution is not intended to be a wholly automated function of EDS's, as one commenter thinks, procedures appropriate to each type of technology and location will be developed. Alarm resolution may induce some operational difficulties, such as delays

screening at foreign airports may actually reduce delays at locations where physical searches are now conducted, especially in Western Europe.

### **Carry-On Baggage**

A few commenters state that carry-on baggage should be subject to EDS screening as well as checked baggage because dupes and suicidal individuals may carry their explosives aboard in hand baggage. While the FAA is actively looking at the carry-on baggage screening process, requiring EDS for carry-on baggage is beyond the scope of this rulemaking. Improvements in carry-on baggage screening requirements have already been instituted in a number of geographic locations, and other improvements are being considered as part of other FAA security initiatives. The FAA will continue to evaluate the feasibility of requiring that EDS screening be applied to carry-on baggage.

### **Potential Radiation Effects**

Some commenters voice concern regarding possible radiation from the use of any EDS that uses a radioactive source. The commenters advise that baggage handlers and the public may suffer ill effects from exposure to the radiation emitted during the decay of the induced radioactivity, and that the baggage may retain radioactivity after screening. Because of the possible effects of exposure, one commenter has suggested that the National Environmental Policy Act of 1969 requires an environmental impact statement for this rulemaking.

While this final rule regulates air carriers under part 108, it should be noted that the FAA has previously addressed the subject of security equipment in connection with the acquisition of such equipment by airports under part 107 of the Federal Aviation Regulations (14 CFR part 107). Such acquisition has been categorically excluded from environmental assessment under FAA Order 5050.4A, *Airport Environmental Handbook*.

With respect to the use of security equipment, the key difference between part 107 and part 108 is that, under part 107 it is the airport that acquires the security equipment for installation and use, whereas under part 108 the air carrier does so. There are no differences between these regulations that suggest that the categorical exclusion under part 107 should not apply with respect to part 108. Nevertheless, because of particular concerns raised regarding EDS's that use radioactive sources, and since the Nuclear Regulatory Commission (NRC) determined that an environmental assessment (EA) was appropriate with respect to its role in licensing EDS's that use radioactive sources, an EA has been prepared to aid the FAA's response to these docketed comments and has been included in the docket.

As stated in the FAA's EA, the NRC conducted its environmental review in amending the FAA's Materials License (which permits the use of equipment employing thermal neutron activation technology at John F. Kennedy International Airport) to authorize the FAA to install and operate this equipment at other airports. In an "Environmental Assessment and Finding of No Significant Impact" (published in the *Federal Register* at 54 FR 33636, August 15, 1989), the NRC examined the environmental impacts of installing and operating TNA devices at airports, including possible external exposure of workers and passengers, possible internal exposure of passengers or other members of the public who may consume irradiated food items packed in baggage, anticipated radiation doses, potential exposure due to malfunctions of the EDS, and several accident scenarios. The NRC concluded that the environmental effects of normal TNA use in baggage or cargo handling ramps will be insignificant. The NRC found that while some short-term residual radioactivity is induced in baggage at the time of screening, by the time the baggage emerges from the machine, the radioactivity is negligible. The NRC further found that "the maximum unrestricted area concentrations are calculated to be well below the maximum permissible concentrations specified in 10 CFR 20.106 and 10 CFR part 20, appendix B."

The FAA's EA for this rulemaking adopts the NRC's "Environmental Assessment and Finding of No Significant Impact." It provides that, in order to assure that implementation of the new regulation through the air carrier security programs will not permit a degrading of the minimal radiation exposure

The EA also indicates that, for each EDS that is approved by the FAA under § 108.20, each security program will also require that the carrier continue to comply with all conditions imposed on the installation and operation of that system under the NRC licensing and registration process.

The purpose of these requirements is to provide additional assurance that there will be no significant exposure to radiation. For these reasons, the FAA's EA concludes that the implementation of this final rule with respect to the installation and use of EDS's involving radioactive sources will not cause a significant impact on the quality of the human environment.

In consideration of the foregoing, the FAA environmental assessment included in the docket for this final rule contains a finding of no significant impact.

Two commenters doubt whether certain foreign governments opposed to the presence of nuclear materials would allow TNA machines to be installed. Where needed, the FAA will work to effect coordination with foreign governments. The FAA recognizes that it cannot require air carriers to comply with EDS regulations if they are precluded from doing so by a foreign government. Should such an instance arise, the FAA would require alternate procedures.

#### **Miscellaneous**

*Wet leases*—One commenter expresses concern over aircraft operated under wet leases. Wet leasing is the practice of air carriers leasing aircraft and flightcrews (except flight attendants) to foreign carriers. Usually foreign carriers paint the aircraft and operate them as though they were their own. The commenter feels that because the baggage on flights on such aircraft would be subject to EDS screening, the resulting delays would mean foreign carriers would want to avoid leasing U.S. aircraft and therefore be able to bid more successfully for wet leases among themselves.

Because wet leases may present special circumstances, especially where the aircraft is not readily identifiable as a U.S. aircraft, the FAA will work with carriers regarding the application of EDS requirements and consider the use of alternative procedures.

*Insurance*—One commenter believes the FAA should assume responsibility for obtaining adequate insurance for suppliers of EDS equipment. The FAA does not agree with this comment as suppliers of aircraft and other aviation products have the capability of building the price of insurance into their product costs.

#### **Discussion of the Final Rule**

The final rule is being adopted as originally proposed. Thus, the FAA will have the authority to amend each air carrier's approved security program to require use of EDS's to screen all checked baggage on all international flights by U.S. carriers for which screening is required.

In its initial exercise of its authority under this final rule, the FAA intends to require deployment of about 150 EDS's at approximately 40 international airports that are served by U.S. air carriers, taking current security procedures and threat information into account. The FAA has already issued a proposed amendment to the security programs of U.S. air carriers relating to the initial deployment. If the proposed amendment is adopted, the FAA projects that as many as 50 EDS's may be in use by the end of 1990, and approximately 150 EDS's may be in use by the end of 1991. The FAA will work closely with the industry in the implementation of the rule and evaluate operational experience to determine whether changes to these projections are necessary. As indicated in the NPRM, the FAA intends to phase-in implementation of this rule and may later expand the deployment to international flights at additional locations.

As stated in the proposed rule, the FAA will carefully consider whether and when to require the installation of EDS's at locations beyond the initial deployment. Any further deployment would occur

#### *Section 108.20*

This new section will require that each certificate holder conducting screening under an approved security program use an approved EDS to detect explosives in checked baggage on international flights in accordance with its security program. The rule does not require each individual certificate holder to own an EDS, nor does it preclude use of a single EDS by several air carriers. Indeed, the FAA believes that cooperation among air carriers is critical to the effective implementation of this rule.

#### **Regulatory Impact Analysis Summary**

Executive Order 12291, dated February 17, 1981, directs Federal agencies to promulgate new regulations or modify existing regulations only if the potential benefits to society for the regulatory change outweigh the potential costs to society. The Order also requires the preparation of a Regulatory Impact Analysis of all "major" proposals except those responding to emergency situations or other narrowly defined criteria. A "major" proposal is one that is likely to result in an annual effect on the economy of \$100 million or more, a major increase in consumer costs, or a significant adverse effect on competition.

This final rule is determined to be a "major" rule as defined in the Executive Order, so a full Regulatory Impact Analysis evaluating alternative approaches has been prepared. This analysis is included in the docket, and quantifies, to the extent practicable, estimated costs to the private sector, consumers, Federal, State, and local governments, as well as anticipated benefits and impacts.

A summary of the Regulatory Impact Analysis is contained in this section. For a more detailed analysis, the reader is referred to the full Regulatory Impact Analysis contained in the docket (see ADDRESSES).

This section summarizes the cost and benefit assessment of an amendment to part 108 of the Federal Aviation Regulations which would require U.S. air carriers conducting screening under an approved security program to use an explosives detection system (EDS) approved by the Administrator to screen checked baggage on international flights. The addition of new § 108.20 will require affected air carriers to use explosives detection systems in accordance with the provisions established by the Administrator and contained in their approved security programs. In addition, the economic analysis also considers two other alternatives; these include the option of broadening the scope of coverage to include screening all domestic and international baggage with EDS, and one in which screening would be conducted only for international operations at airports selected on a threat-driven basis.

The primary objective of this rule is the prevention of criminal acts or acts of terrorism against U.S. air carriers by individuals using explosive devices. Toward this end, the FAA has conducted extensive research aimed at detecting explosives. This research has concentrated on explosives detection system devices, including the Thermal Neutron Analysis (TNA) system and vapor detection systems, as well as advanced x-ray systems. The TNA device is the most advanced explosives detection system now available. Its capabilities can be enhanced by equipping them with x-ray systems. Therefore, the FAA has elected to analyze three alternative proposals for explosive detection using these enhanced TNA systems over the ten-year period of 1990 to 1999. These are—

the threat-driven alternative. Install 200 explosives detection systems at an unspecified number of domestic and foreign airports over a three year phase-in period, based on a threat-driven approach (100% checked baggage screening of all international flights at selected airports, eventually requiring 300 explosives detection systems by 1999).

It is important to note that in the NPRM, Alternative II's phase-in period was three years, while here, it is five years. The number of TNA systems required to screen all international flights at current enplanement levels rose from 179 in the NPRM to 491 in the final rule. The production capacity does not exist to install this many systems within three years, but will exist within five years.

The methods and assumptions used in the analyses for the alternatives have been developed by the FAA. A major consideration guiding this analysis is the assumption that 100% screening of checked baggage on flights where passenger screening is currently required would be conducted under all three scenarios at those airports where EDS are to be used. The analyses assume enough systems to take into account peak hour travel, the projected growth in enplanements, and air carrier logistical difficulties. Preliminary cost factors were obtained from manufacturers and research organizations. Information for the formulation of benefits was obtained from the safety records of the international Civil Aviation Organization (ICAO) and the FAA. The costs and benefits of each of these alternatives have been analyzed over the ten-year span of 1990 to 1999.

The costs associated with the acquisition, installation, operation, and repair and maintenance of the TNA systems were difficult to quantify because these systems are still in an early stage of development. As such, there is limited experience on which to draw. At the present, there is only one manufacturer now capable of producing TNA systems. The FAA encourages other manufacturers to develop and produce explosives detection systems to meet the anticipated worldwide demand. In addition, the FAA believes that the entry of other manufacturers into the market would stimulate competition and would reduce costs. Thus, the unit costs used in the analysis assume that mass production techniques and the efficiency with which enhanced TNA and other EDS and x-ray systems are produced would reduce prototype and initial production cost estimates. The FAA assumes that production capacity in 1990, the first year that the rule would be in effect, could be as high as 50 units. Production capacity could increase to as many as 100 units in 1991 and could expand to an annual rate of more than 150 units thereafter.

The FAA has estimated costs for explosives detection system equipment, x-ray enhancement apparatus, equipment maintenance and repair, airport space rental, and labor; these have been used to estimate the cost of compliance with the three alternatives. The cost of a prototype TNA system is estimated to be \$1 million in 1990. Based on discussions with the manufacturer on a quantity purchase, the FAA projects that the acquisition cost of a basic EDS unit, including delivery, installation, and operator training, would be \$750,000 in 1990 and 1991. The FAA further believes that the effect of competition and the expected increase in the efficiency with which these units would be produced over time, which would yield economies of scale, would cause the cost of \$750,000 to decline to \$500,000 per TNA unit. On the basis of the limited operating history of the equipment and information furnished by the manufacturer, the annualized cost of maintenance and repair for an explosives detection system is estimated to be \$26,200 per year. The FAA expects that the acquisition cost of x-ray enhancement units, including delivery and installation and training, is assumed to be \$150,000 per unit in 1990 and 1991 and fall to \$75,000 per unit in 1992 and the ensuing years. The estimated annual cost of maintenance and repair for the x-ray system is estimated to be \$15,000 per unit in 1990 and 1991, which would then decline to \$7,500 per unit per year in 1992 and the following years.

The FAA assumes for this analysis that airport space for the system would be rented at an estimated \$25 per square foot per year which would cover all costs for site preparations (such as floor reinforcing or new construction), electrical power availability, space rental, etc. Using the estimated rental rate of \$25 per square foot per year, this yields an average yearly rental fee of approximately \$19,000 per system. This stream of revenues is expected to enable the airport authorities to recover all capital expenses over time.



record for the ten year period between 1979 and 1988. This review reveals that 19 separate criminal acts and incidents of terrorism using explosives were perpetrated against U.S. air carriers during this period. The FAA has classified these incidents into Class I and Class II categories. The Class I category includes those incidents, such as the explosion aboard Pan American (Pan Am) Flight 103, that involve the loss of an entire aircraft and a large number of fatalities. Class II accounts for all other incidents in which airplanes were only partially damaged or the incident was partially averted, such as explosions that occurred outside the aircraft (usually somewhere in the airport itself). These two types of incidents vary significantly both in terms of costs and their frequency. The FAA estimates that those Class II incidents that would occur over the ten years from 1990 to 1999 would result in a discounted cost of \$31.0 million.

The losses associated with Class I or major incidents would, of course, be substantially greater. For example, the loss in human life and property, and reduced revenues from the loss of U.S. carriers' market share associated with Pan Am Flight 103 are estimated to have a present value range of \$411.0 million to \$520.0 million depending on the extent of market reduction. It is difficult to predict the extent to which international terrorism will increase. Nevertheless, the FAA believes that in the absence of additional preventive measures terrorist attacks against U.S. air carriers would continue. The FAA can not predict the number and severity of future incidents. The frequency of such incidents would depend on several factors, including, but not limited to, the world-wide political climate, the skill and technical sophistication of terrorist organizations, and the success of efforts to avert these incidents. Given the historical record of one such incident in each of the past two decades and the expectation that the general threat will increase, and moreover, that the specific threat of sabotage will also increase, the FAA estimates total benefits on the basis of two Class I incidents. Therefore, in this case, the present value of the benefit associated with the prevention of these incidents would be as high as \$1.071 billion. Table I of this summary shows the estimated costs and benefits of these alternatives:

**TABLE I**  
**SUMMARY OF COSTS AND BENEFITS**  
(Net Present Value in Millions of Dollars)

<i>Options</i>	<i>Estimated Costs</i>	<i>Percentage of Total Incidents Avoided for Breakeven*</i>	<i>Calculations</i>
Alternative I (Domestic and International Alternative)	\$1,420	33	$\$1,420/\$1,071 = 133\%$
Alternative II (International Alternative-The Final Rule)	\$ 896	84	$\$ 896/\$1,071 = 84\%$
Alternative III (Threat-Driven Alternative)	\$ 393	37	$\$ 393/\$1,071 = 37\%$

\*The sum of the total incidents is equal to two Class I incidents and all Class II incidents avoided. The discounted present value of these incidents avoided is \$1,071 million. The percentages do not represent a judgment of the relative effectiveness of each alternative.

Table I examines how many Class I and Class II incidents would have to be prevented by each alternative for the alternatives to be cost beneficial. The percentages in the table do not represent a judgment of the relative effectiveness of each alternative; they show the percentage of total incidents whereby each of the three alternatives will have different breakeven points so as to become cost beneficial. The costs associated with each alternative are compared with those benefits projected from avoiding two Class I incidents and a discounted present value of the \$31 million worth of projected cost from all Class II incidents. For the purposes of this analysis, this is the projected universe of incidents that these alternatives are designed to address.

the probabilities of a Class I or Class II event for each alternative scenario.

In addition to these quantifiable benefits, the FAA expects further significant unquantifiable benefits. The rule would result in public recognition of additional security measures implemented by U.S. air carriers. The public's subsequent higher confidence levels should result in more passengers and higher revenues.

The deterrence of terrorist attacks against U.S. civil aviation also has significant public and foreign policy benefits. In addition to the tragic effects on those involved and their families and friends an attack on an American aircraft disrupts the lives and plans of great numbers of people who have suffered no direct loss in the incident. (Indeed, this is presumably one of the goals of those who perpetrate terrorist attacks.) The FAA cannot calculate the cost of uncompleted business, disrupted education, and deferred vacations. Nevertheless that cost is unquestionably significant, and it will be avoided if the public retains a high level of confidence in the safety of the civil air transportation system. Maintaining and improving the public's confidence, while at the same time reducing the threat to human life and property, is the central goal of this rulemaking.

*Comments*—A total of 12 commenters raise economic issues. Some of those comments that dealt directly with economic issues as described in the NPRM will be briefly summarized in this section.

Several of the comments point out that the NPRM analysis did not include the costs of constructing housing and/or supporting structures for those EDS's that would need them. The FAA specifically had requested comments on such costs, and, based on these comments, has added housing costs by means of the calculation of space rental data. It is the FAA's view that the costs involved would depend on the individual circumstances and that the actual location of each EDS would be determined by individual airport layout and other factors.

One commenter believes that the analysis seriously underestimates the number of systems needed at New York-Kennedy Airport and other similarly configured and heavily utilized airports. This commenter believes that 2400 systems would be needed under Alternative II, which is six times the number of systems estimated in the NPRM. The assumption used in the commenter's analysis revolves around the belief that 30, instead of 5, systems would be needed for New York-Kennedy Airport. (Five TNA systems were assumed for New York-Kennedy Airport in the NPRM's Alternative II). Therefore, because six times as many systems would be needed for this airport, the commenter estimates that six times the number of systems would be needed at all airports, both now and through 1999. The commenter did not disclose the methodology by which it was calculated that 30 machines would be needed for this gateway airport, so it is impossible for the FAA to analyze these assertions. Very few other airports included in the FAA's analysis are similarly configured or as heavily utilized as New York-Kennedy Airport. Therefore, while the FAA recognizes that the NPRM analysis underestimated the EDS requirements at a few major airports, it does not follow that the agency's analysis underestimated such requirements at all airports. As is discussed in the following paragraph, the FAA has recalculated the number of required systems.

The analysis presented in the Regulatory Impact Analysis may address some of the assumptions that were inherent in this commenter's analysis. To obtain the daily average number of outbound passengers, the annual numbers of outbound passengers for each airport was divided by 312 days; 312 days was used instead of 365 days to reflect the fact that many flights do not operate 7 days a week. The international peak hour percentage was increased from 15% to a range of 25% to 50%, depending on annual passenger flow, to take into account the demands on such heavily utilized airports. The per hour baggage requirements on the systems was lowered to 540 an hour to take into account the fact that baggage probably will not always be able to be fed into the system at a steady stream. In addition, extra machines were added to the busiest domestic and foreign airports to account for airport layout and baggage interline and transfer problems. For example, this analysis' estimate for the number of TNA systems required at New York-Kennedy is nineteen, which the FAA believes is realistic.

Several commenters state that alternative EDS technologies exist that are less expensive than TNA. Currently, the TNA is the only explosives detection system that has been approved for use by the FAA. The FAA welcomes other EDS technology that will be less expensive than the TNA. TNA costs are used in the FAA's analysis because it is the only existing, proven system.

Several commenters raise environmental concerns with respect to the potential radiation effects of TNA systems. One comment called for the FAA to prepare an environmental impact statement with respect to this potential impact. In response to these comments the FAA has prepared an environmental assessment. This assessment has resulted in the conclusion that the adoption and implementation of this final rule will not have an adverse impact on the quality of the human environment. The assessment and Finding of No Significant Impact are included in the docket.

Several commenters state that since terrorism is being perpetrated against the U.S. government and not the air carriers, the government should pay for these systems. The U.S. government has traditionally not funded security measures needed to protect passengers on privately owned air carriers and does not intend to do so in this instance.

There has been concern expressed that requiring all U.S. air carriers to purchase EDS equipment would be an unrealistic drain on many of them, especially small carriers and those with unscheduled service. The rule does not require carriers individually to purchase EDS systems for their own private use. Such carriers have the commonly used option of renting the use of such facilities from other carriers.

#### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily and disproportionately burdened by Government regulations. The RFA requires Federal agencies to review rules which may have a "significant economic impact on a substantial number of small entities." Issuance of the amendment to part 108 of the FAR will affect some small air carriers. The FAA's Order prescribing small entity size standards identifies a small air carrier as one with nine or fewer operating aircraft. According to FAA data for the period ending December 31, 1988, there were 54 air carriers subject to the rules of part 121 that operated nine or fewer airplanes. These 54 carriers are the entities affected by the rule.

The criteria for a "substantial number of small entities" is one-third of the small firms subject to the final rule, but no fewer than 11 firms. A review of the 54 small carriers engaged in scheduled and unscheduled service shows that only 10 firms would be subject to this rule. Therefore, it is certified that the amendment to part 108 would not have a significant economic impact on a substantial number of small entities. In any event, if unforeseen problems arise in specific situations, the FAA will work with the air carrier involved to address appropriate checked baggage screening procedures.

#### **Trade Impact Statement**

The FAA finds that this rule will only impact part 121 operators and thus it is not likely to affect international trade. This final rule is expected to have no impact on trade opportunities for either U.S. firms doing business overseas or foreign firms doing business in the United States. While there will be an increased cost to U.S. air carriers as a consequence of this rule, these increased costs will be offset by the increase in public confidence, the avoidance of incidents, and by the ability to reduce the use of certain costly security procedures now required of U.S. air carriers.

#### **Paperwork Reduction Act**

The FAA finds that this final rule will not result in an additional burden under the Paperwork Reduction Act.

positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This final rule is considered significant under the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034; February 26, 1979) because of its cost and the substantial public interest in aviation security. A Regulatory Impact Analysis of this rule, including a Regulatory Flexibility Determination and a Trade Impact Analysis, has been placed in the docket. A copy may be obtained by writing to the Director of Civil Aviation Security (see ADDRESSES).

#### **The Amendment**

In consideration of the foregoing, the Federal Aviation Administration amends part 108 of the Federal Aviation Regulations (14 CFR part 108) effective October 5, 1989.

The authority citation is revised to read as follows:

*Authority:* 49 U.S.C. 1354, 1356, 1357, 1421, 1424, and 1511; 49 U.S.C. 106(g) (revised, Pub. L. 97-449, January 12, 1983).

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#### **Amendment 108-8**

#### **Advanced Qualification Program**

**Adopted: September 26, 1990**

**Effective: October 2, 1990**

**(Published in 55 FR 40262, October 2, 1990)**

**SUMMARY:** This Special Federal Aviation Regulation (SFAR) establishes a voluntary, alternative method for the training, evaluation, certification, and qualification requirements of flight crewmembers, flight attendants, aircraft dispatchers, instructors, evaluators and other operations personnel subject to the training and qualification requirements of 14 CFR parts 121 and 135. The FAA has developed this alternative method in response to recommendations made by representatives from the government, airlines, aircrew professional organizations, and airline industry organizations. The SFAR is designed to improve aircrew performance and allows certificate holders that are subject to the training requirements of parts 121 and 135 to develop innovative training programs that incorporate the most recent advances in training methods and techniques.

**FOR FURTHER INFORMATION CONTACT:** Mr. David Catey, Air Carrier Branch, Air Transportation Division, Flight Standards Service, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-8094.

#### **SUPPLEMENTARY INFORMATION:**

##### **Background**

On February 22, 1989, the FAA issued Notice of Proposed Rulemaking (NPRM) 89-4 [54 FR 7670]. This notice proposed to establish a voluntary, alternative method for meeting the training, evaluation, certification, and qualification requirements for flight crewmembers, flight attendants, aircraft dispatchers, instructors, evaluators and other operations personnel subject to the training and qualification requirements of 14 CFR parts 121 and 135.

##### **Statement of the Problem**

14 CFR parts 61, 63, 65, 108, 121, and 135 contain the Federal Aviation Regulations that regulate air carrier training programs and the training and qualification requirements, including applicable certification

are not conducive to the most efficient use of new training methods. In addition, current certification practical test requirements no longer provide for a complete evaluation of the knowledge and skills needed to operate certain new aircraft.

Of special importance is the consensus among industry and government that training should emphasize crew coordination and the management of crew resources. Traditionally, airline training and checking has been weighted toward the pilot in command (PIC) with less stringent requirements for the other crewmembers. This has led to training and checking of pilots on an individual basis, in an environment that is not crew-task oriented. Furthermore, flight crewmember training historically has focused on flying skills and systems knowledge while neglecting factors such as communication skills, coordination and decision making.

Evidence accumulated in the last decade suggests that a high percentage of air carrier incidents and accidents have been caused, at least in part, by a failure of the flightcrew to use readily available resources. National Aeronautics and Space Administration (NASA) studies which were performed over the last ten years indicate that more than 60% of fatal air carrier accidents were not directly related to mechanical failure or lack of pilot skills but rather to a breakdown in cockpit communication. These NASA studies emphasize a deficiency in present recurrent training in skills related to human factors.

The name given to these skills is Cockpit Resource Management (CRM). CRM is generally understood to be the effective use of all resources available to the crew—hardware, software, and all persons involved in aircraft operation—to achieve safe and efficient flight operations. While some airlines have developed CRM programs, certainly not all who could benefit from such programs are doing so. Many who would like to incorporate such training need guidance in developing CRM programs.

In June of 1988, the National Transportation Safety Board (NTSB) issued a Safety Recommendation (A-88-71) on the subject of CRM training. The recommendation stemmed from an NTSB accident investigation of a Northwest Airlines crash on August 16, 1987, in which 148 passengers, 6 crewmembers, and 2 people on the ground were killed.

The NTSB noted that both pilots had received single-crewmember training during their last flight simulator training and proficiency checks and that the last CRM training they had received was 3.5 hours of ground school (general) CRM training in 1983. As a result of its investigation, the NTSB recommended that all part 121 carriers:

Review initial and recurrent flightcrew training programs to ensure that they include simulator or aircraft training exercises which involve cockpit resource management and active coordination of all crewmember trainees and which will permit evaluation of crew performance and adherence to those crew coordination procedures.

### **History**

On August 27, 1987, the then FAA Administrator addressed the chief pilots and certain executives of numerous air carriers at a meeting held in Kansas City. One of the issues discussed at the meeting focused on flight crewmember performance issues. This meeting led to the creation of a Joint Government-Industry Task Force (Joint Task Force) on flight crew performance comprised of representatives from major air carriers and air carrier associations, flight crewmember associations, commuter air carriers and regional airline associations, and government organizations.

The major substantive recommendations to the Administrator from the Training Working Group of the Joint Task Force were the following: (1) Require part 135 commuters whose airplane operations require two pilots to comply with part 121 training, checking, qualification, and recordkeeping requirements. (2) Provide for a Special Federal Aviation Regulation (SFAR) and Advisory Circular (AC) to permit development of innovative training programs. (3) Establish a National Air Carrier Training Program Office to provide training program oversight at the national level. (4) Require seconds in command (SICs) to satisfactorily perform their duties under the supervision of check airmen during operating experience.

an AQP with training curriculums that depart from current requirements and that take advantage of the most advanced training techniques as long as its AQP meets the SFAR requirements and provides at least an equivalent means of compliance with current regulations in all categories of training and in all subject categories (e.g., windshear and emergency training). Because an approved AQP will build on the present system, it will be as safe as or an improvement on the safety level of the current system. The FAA considered all comments on the proposed SFAR and AC in developing this final rule and the accompanying AC.

#### **Related Advisory Circulars**

In addition to the AQP AC developed as part of this rulemaking a number of other Advisory Circulars are relevant and are referred to throughout this document. They are:

- AC 120-51 Cockpit Resource Management Training
- AC 120-35A Line Operational Simulations
- AC 120-40 Airplane Simulator Qualification
- AC 120-45 Airplane Flight Training Devices Qualification

#### **Reorganization of Final Rule**

As proposed, § 3 of the SFAR contained almost one third of the text. For ease of usage, this text is dealt with in §§ 3 through 6 of the final rule. Throughout the following discussion of comments, the proposed rule section is referred to when describing comments and the final rule section is referred to where appropriate.

#### **Discussion of Comments**

##### *General*

Twenty-six persons or organizations submitted comments on the proposed SFAR and the AC. Many submitted multiple comments. Comments were submitted by air carriers, air carrier associations, crewmember associations, commuter and regional airline associations, pilot training centers, equipment manufacturers, and individuals.

Virtually all of the commenters commend the FAA for taking rulemaking action that would allow for innovation in training and encourage CRM training. Most of the commenters raise specific concerns about the proposed SFAR and the draft AC. A discussion of the issues raised by commenters follows.

#### **Task Force Recommendations**

The preamble to the proposed SFAR stated that the Joint Task Force recommendations were separated into those that should be incorporated in an SFAR and those that would be incorporated in subsequent rulemaking actions. Five commenters state that the Joint Task Force recommendations were meant to be taken as a whole.

*FAA Response:* The preamble statement was incorrect. The FAA chose to proceed immediately with the SFAR because the agency lacks the resources to implement all of the Joint Task Force recommendations at once. Also, information obtained from the voluntary programs implemented under the SFAR would be of value to the agency in determining the need for future changes to parts 121 and 135. The FAA will proceed with the other recommendations as resources permit.

#### **Inclusion of Hazardous Materials and Security Training**

The preamble to the proposed SFAR stated that, to avoid duplication of effort, an AQP would not be applicable to the training requirements in two specific areas, security training for crewmembers

the SFAR is that higher quality training and appropriate safeguards will allow an increase in the time interval between training sessions beyond the 12-calendar month recurrent training currently required in these two areas.

Therefore, if these areas of training are not covered under an AQP, 12-calendar month recurrent training in these areas would remain mandatory and destroy the flexibility and economic incentive for an AQP.

*FAA Response:* The FAA has reconsidered the proposed exclusion and agrees with the commenters. Hazardous materials and security training will be included under an AQP. Section 108.23(b) concerning security training has been revised to allow for this. The AQP AC has been amended accordingly.

Section 108.23(b) has also been revised to allow flexibility for security training that is conducted under § 121.417 or § 135.331. Whenever a crewmember who is required to take recurrent security training completes the training in the calendar month before or the calendar month after the calendar month in which that training is required, he is considered to have completed the training in the calendar month in which it was required. This amendment is not related to AQP which otherwise provides the same flexibility for recurrent training. This amendment is being included to allow certificate holders the same flexibility in scheduling recurrent security training as they now have in scheduling other recurrent training under current § 121.417 and § 135.33.

### **Planned Hours**

Proposed § 3(b)(1) stated that a qualification curriculum must include “planned hours of ground instruction, flight instruction . . . and evaluation.” The planned hours would replace programmed hour requirements in part 121 subpart N and, thereby, provide more flexibility while maintaining a concept of appropriate training time needed to cover specific areas of training.

Five comments were received on this subject. One commenter questions whether the term “planned hours” refers only to ground instruction or also to flight instruction. One commenter states that programmed hours should be required to guarantee a minimum level of training. Two commenters state that hourly requirements should not exist and that all training should be objective based. One commenter states that at least planned hours should be required.

Two comments were also received on a related issue. Paragraph 71 of the draft AQP AC states that if an individual is evaluated and does not pass, the individual must complete the planned hours of the curriculum. According to the comments, this appears to be a penalty rather than an effort to train to proficiency.

*FAA Response:* The “planned hours” in proposed § 3(b)(1) (final rule § 5(a)) refers to both ground training and flight training. The AQP must state how many hours are planned for each type of training; however, in both cases, the training is objective based and, therefore, the number of hours needed for a particular student is flexible—it may take more or fewer hours than what is planned for that curriculum. Ground training continues until the student can show that he or she has mastered the material. Similarly, flight training continues until the student can show that he or she has progressed successfully through the curriculum and demonstrates proficiency in the knowledge and skills needed to serve in a specific crew position for a specific make, model, and series aircraft (or variant). The AQP AC has been rewritten to clarify the requirement.

In response to the related comment on paragraph 71 of the draft AC, the FAA has changed the AQP AC language (paragraph 38(h)) to remove the apparent penalty. If an individual fails a proficiency evaluation, that individual should complete additional training as needed before being administered another proficiency evaluation.

pilot crewmembers should be included in mandatory participation, and flight engineers should be excluded, since flight engineer training events and devices are different from those for pilots. One commenter states that eliminating traditional categories of training (initial, transition, etc.) will require the same training regardless of previous experience. One commenter requests that flight attendants be included in AQPs as soon as possible. Another requests that an AQP be allowed to cover only flight attendants or aircraft dispatchers.

A related comment concerns elimination of aircraft "groups" in the AQP. This comment states that the "group" concept is still applicable to portions of the AQP AC that refer to specific category/class and powerplants.

*FAA Response:* The requirement that an AQP curriculum is specific to make, model, series aircraft (or variant) and to duty positions of crewmembers is retained in the final rule as is the provision that it may apply to flight attendants, aircraft dispatchers, and other operations personnel. The curriculum must apply to all flight crewmembers, including flight engineers, in order to incorporate CRM training effectively. It could not apply only to aircraft dispatchers and flight attendants, since a main purpose of an AQP is to develop training programs that emphasize crew coordination. While the FAA agrees with comments regarding the importance of including flight attendants and aircraft dispatchers in an AQP and encourages certificate holders to do so, it is requiring that an AQP apply to flight crewmembers since CRM training for flight crewmembers is the most urgent need. Furthermore, the studies and research being done in CRM have focused primarily on cockpit communications and coordination.

All qualification and continuing qualification curriculums must be aircraft specific because of differences among make, model, and series aircraft (or variant). These differences apply to flight attendants and aircraft dispatchers as well as to flight crewmembers. An AQP establishes proficiency objectives that are aircraft and duty position specific. A certificate holder would be required to establish a separate curriculum for a variant of a make, model, or series aircraft if the FAA determines that knowledge or skills required for safe operation are significantly different and, therefore, require a certificate holder to provide additional training or other qualifications for crewmembers and dispatchers who operate the variant aircraft. For example, if an individual moves from one aircraft to another, to a variant design configuration of an aircraft make, model, and series, or from one crewmember position to another, that individual would be subject to the qualification requirements of the specific curriculum. However, an individual would not be required to repeat any common requirements of curriculums in which he or she has already achieved proficiency. The AQP would allow the certificate holder to select from a curriculum those modules for which the individual must achieve proficiency to be qualified under a specific curriculum. Hence, the concept of an aircraft and duty position-specific curriculum incorporates traditional differences and transition training. The AQP does not require redundant training where proficiency has already been achieved.

The FAA's purpose as stated in the preamble to the proposed SFAR is to eliminate all references to aircraft groups as defined in § 121.400. The AC contains no such references.

### **Frequency of Training**

The proposed SFAR in § 3(c)(1) would require continuing qualification curriculums which must include a continuing qualification cycle with, initially, a 26-calendar month limit. During this continuing qualification cycle, each person qualified under an AQP must receive a balanced mix of training and evaluation in all events and subjects that were required for original qualification. The continuing qualification cycle duration may be extended by approval of the Administrator in 3-calendar month increments to a maximum cycle of 39 calendar months.

Under the proposal, each continuing qualification cycle must include recurring training sessions at a training facility for each person qualified under an AQP. The frequency of the sessions must be approved by the Administrator. Initially, the frequency could not exceed 13 months. Thereafter, upon



recurring training sessions and the duration of continuing qualification cycles.

- Some commenters want no limits on continuing qualification cycles or the intervals between training sessions. They prefer that recurrent training be based solely on maintaining proficiency as evaluations indicate a need.
- Some commenters maintain that the 3-calendar month increment was too conservative since carriers have obtained exemptions that extended recurrent qualification steps by 6 calendar months, without any degradation in safety.
- Several commenters, including pilot and flight engineer associations, object to extending recurrent qualification limits.
- Several commenters are concerned that justifying an extension might be hard to do. These commenters are uncertain how they would show no loss of knowledge or skills. Other commenters question how air carriers could demonstrate no degradation in safety. One commenter believes that the FAA should eliminate extension provisions from the SFAR until the FAA has established rigid criteria for approving extensions.
- Specific issues concerning continuing qualification are (1) whether the requirements for recurrent training at a facility preclude home study; (2) whether new hires and new aircraft would be treated more restrictively; and (3) whether the language in proposed § 3(c)(1) should be changed from “the frequency of these recurring sessions” to “the intervals between recurring sessions.”

*FAA Response:* With a minor exception, the final rule retains the continuing qualification cycle duration as proposed. None of the comments raise significant issues that would warrant changes to the proposed requirements. The initial maximum limit on the duration of intervals between recurring training sessions is basically the minimum requirement in part 121 and part 135 now, including the exemptions issued for PIC proficiency checks.

However, the rule language and the AQP AC have been revised to clarify the relationship of the duration of the continuing qualification cycle and the maximum duration of the interval allowed between training sessions.

The final rule (§ 6(b)(1)) states that each continuing qualification cycle must include at least one evaluation period. During an evaluation period each person qualified under an AQP must receive at least one training session at a training facility. Also, each person qualified under an AQP must complete a proficiency evaluation as required under SFAR § 6(b)(3), and each PIC must complete an online evaluation as required under SFAR § 6(b)(3). An individual's proficiency evaluation may be accomplished over several training sessions if a certificate holder provides more than one training session in an evaluation period.

Section 6(c) states the duration of a continuing qualification cycle and evaluation period. Initially, a continuing qualification cycle may not exceed 26 calendar months, and the evaluation period may not exceed 13 calendar months. Increments for extending the duration and maximum limits remain as proposed.

The AQP AC has also been revised to be consistent with the SFAR and to provide guidance in structuring a continuing qualification curriculum in the interest of efficiency and safety. In accordance with the methodology for curriculum development recommended in the AQP AC, proficiency objectives to be evaluated during a cycle may be divided between critical and non-critical proficiency objectives. All critical proficiency objectives, as approved by the Administrator, would have to be evaluated within an evaluation period, while non-critical proficiency objectives could be evaluated periodically over the longer duration of the continuing qualification cycle. While this level of detail is not specified in the rule, the rule language allows for more efficient structuring of evaluation curriculum segments.

The purpose of a continuing qualification cycle is to provide flexibility with reasonable time limits. If either an evaluation period or a continuing qualification cycle is extended by 3 calendar months with

be continuously collecting proficiency data, the 3-month limit does not impose an unreasonable burden.

In response to specific comments: (1) The requirements for training under a continuing qualification curriculum do not preclude home study as long as home study has been approved as part of an AQP curriculum; (2) new hires and new aircraft would be treated more restrictively as indicated in the AQP AC, since neither the certificate holder nor the FAA in such cases would have a valid basis to justify extending evaluation periods or continuing qualification cycles; (3) the concept of evaluation periods corrects the terminology problem in "frequency of recurring sessions."

#### **Data Collection and Recordkeeping**

Proposed SFAR §4(c) would require that each qualification and continuing qualification curriculum include data collection procedures. Data collected from crewmembers, instructors, and evaluators will enable the FAA to determine whether the training and evaluations accomplish the overall objectives of the curriculum. Acceptable guidelines for data collection are set forth in the AC. Proposed §9 would require that an applicant for an AQP establish and maintain records in sufficient detail to establish the training, qualification, and certification of each person qualified under an AQP. The AC specifies acceptable guidelines for establishing and maintaining such individual records. As proposed and in the final rule, data collection and recordkeeping are two separate functions. The data submitted to the FAA for analysis and validation must be submitted without names or other elements that would identify an individual or group of individuals. This data will be analyzed by the FAA to monitor the effectiveness of AQP training, to determine the validity of requests for extensions of training intervals and cycles, and to monitor the effectiveness of CRM training. Individual recordkeeping by certificate holders is needed to show whether or not each crewmember, aircraft dispatcher, or other operations personnel complies with the applicable requirements of the FAR and this SFAR; e.g., qualification training, qualifications, required physical examinations, flight and duty time records, and frequency of training and evaluation.

Twelve comments were received on data collection and recordkeeping. Generally these comments show concern that the burden of data collection and recordkeeping might offset any advantages of participating in an AQP.

*FAA Response:* There can be no AQP without data collection and without records on individual crewmembers, aircraft dispatchers, and other operations personnel. The FAA can only evaluate the validity of a certificate holder's AQP through the collection of data. The certificate holder must collect the data and make that data accessible, without identifying individuals, to the FAA's Air Carrier Training Branch for analysis and evaluation. The individual crewmember, aircraft dispatcher, and the other operations personnel records are to be maintained by a certificate holder, because without them there would be no record of these persons' qualifications and continuing qualifications. Thus, the requirement for individual records that must be maintained under an AQP remains the same as under present § 121.683.

The data collection requirements and recordkeeping requirements (final rule §§7(c) and 12) are the same as those proposed; however, the AC (Chapter 9) has been rewritten in light of specific comments to clarify the overall program validation purpose of data collection and recordkeeping functions and to establish an acceptable approach for meeting the requirements. The AC provides guidance for validation of an AQP through approval and documentation of activities throughout the development, implementation, and continuing operation of an AQP; FAA analysis and evaluation of anonymous performance/proficiency data collected by the applicant; and establishment and maintenance of individual qualification records.

Specific comments relating to data collection and recordkeeping requirements and FAA responses are as follows:

- **Comment:** Data may be used in a punitive way against an airman. **Response:** The data submitted to the FAA for analysis must not be traceable to an individual. This point has been clarified in the AC.

maintains or exceeds past levels of crewmember competency. Response: The FAA recognizes that raw data alone may not indicate clearly whether an AQP curriculum maintains or exceeds past levels of crew competency. However, the FAA believes that, when analyzed, the data collected by the certificate holder will indicate trends and will provide the basis for making necessary judgments about the effectiveness of an AQP program.

- Comment: Once a program is validated, the data requirements should be reviewed to determine if continued collection is needed. Response: The FAA agrees and will do so.

- Comment: Duplication of recordkeeping will occur if the training center and certificate holder are both required to maintain records on airmen. Response: The certificate holder is responsible for ensuring that adequate records will be established and maintained. The training center could be authorized to maintain such records under the supervision of the certificate holder. Thus, duplicate records are not required.

- Comment: Certificate holders should not be required to keep records on training center airmen. Response: Neither the SFAR nor the AC requires them to do so.

- Comment: Certificate holders who have an approved computerized recordkeeping system under part 121 should not be required to establish a separate system. Response: The FAA will not automatically approve any particular computerized systems under the SFAR. However, the FAA will accept automated systems provided they adequately follow AQP AC guidelines. In some cases this may require enhancement of an existing system.

- Comment: The FAA should state why present basic records are not sufficient. Response: Present basic recordkeeping requirements are not based on proficiency training and evaluation within a continuing qualification cycle. Therefore, some changes are needed. However, the AQP recordkeeping requirements are fundamentally the same as the present requirements.

- Comment: Only training records should be maintained, not flight time records. Response: The specific reference to flight time records has been deleted from the AC (paragraph 182) since a certificate holder may choose to keep flight time records in another system while maintaining currency records in the AQP recordkeeping system. Records that pertain to qualification and continuing qualification must be maintained. This includes currency records, since currency is part of continuing qualification. Flight time records are currently required in accordance with §§ 121.653 and 135.63. The AQP SFAR recordkeeping requirements do not establish new requirements for a separate recordkeeping system for certificate holders who conduct both training and qualification in accordance with the requirements of part 121 or part 135 and the requirements of the AQP SFAR. However, in such cases a certificate holder may elect to maintain a separate recordkeeping system. With respect to flight time records, regardless of whether or not a certificate holder elects to conduct its crewmember training and qualification under an AQP or under typical part 121 or part 135 training programs, it must maintain flight time records for applicable crewmembers in sufficient detail to show compliance with the applicable FAR.

- Comment: In the AQP AC, the record requirements mix personnel and scheduling records with training records. Response: The FAA does not agree that AQP AC does this. The AQP AC provides guidance for one means of compliance with AQP SFAR requirements and related FAR requirements. A certificate holder may develop an alternative means of compliance if it can show that the alternative means of compliance is equivalent to that described in published advisory material.

- Comment: The requirement in the draft AC that records for individuals who qualify under an AQP be maintained for 36 calendar months is too restrictive. Response: The AQP SFAR recordkeeping requirements do not provide for a particular retention period for these persons' individual records. Section 12 of this SFAR states, in pertinent part, that each certificate holder shall show that it will establish and maintain records in sufficient detail to establish the training, qualification and certification of each person qualified under an AQP. In addition, the AQP AC does not provide

## CRM

Section 4(b) of the proposed SFAR (final rule § 7(b)) states that "each curriculum must include training and evaluations" in CRM skills. Fourteen of the comments address the subject of CRM, and while none of these commenters objects to the inclusion of CRM in an AQP, most raise questions concerning the specifics of CRM training. Five commenters object to the requirement for evaluation of CRM training. These commenters maintain that objective criteria for evaluating CRM have not been established and further that CRM training is most effective in changing behavior when it is not evaluated.

*FAA Response:* FAA has stated in the accompanying AQP AC nine elements that are appropriate in a CRM session. Initially, a participant in a CRM session would not be subject to a pass/fail decision. However, once data have been collected to validate the effectiveness of CRM training sessions, the FAA believes that objective criteria for evaluation can be developed. After that objective criteria is established, it will become part of qualification and continuing qualification curriculums. An evaluation of a CRM session will result in feedback to each participant and, as appropriate, additional individual or group training will be required.

One commenter provides suggestions concerning the availability of specific participant records and suggests several techniques that could be used to achieve maximum protection of individuals.

*FAA Response:* While initially there will be no evidence in a person's file that could be interpreted as a failure of a CRM session, an individual's record would reflect that additional training in particular areas was considered necessary as a result of a CRM evaluation. However, once the FAA has developed objective criteria for evaluating CRM performance of an individual, the criteria will be used in determining whether an individual is qualified, including certification, and meets continuing qualification requirements. Thus, when CRM objective criteria are fully implemented, it will be possible for an individual to fail a CRM session.

Several of the commenters that generally support the inclusion of CRM training in each AQP suggest the need for regular renewal of CRM scenarios, and the need to make CRM a general requirement beyond the SFAR. Those commenters also suggest using the highest level of flight simulator for Line Operational Simulations and giving instructors and evaluators additional training in teaching and evaluating CRM and Line Operational Simulations.

*FAA Response:* Imposing CRM as a general requirement would be beyond the scope of this rulemaking. While other suggestions are valid, the FAA does not agree that specific additional requirements should be added to the SFAR. The FAA expects that as certificate holders gain more experience in conducting CRM training, some of these suggestions may be incorporated into FAA advisory material.

## PIC Online Evaluation

Proposed § 3(c)(4)(ii) states in part that for a PIC, "An online evaluation in an aircraft must be completed within 30 days of either side of the midpoint between recurring training sessions."

Nine comments were received on this proposed requirement. Most suggest that the provision for flexibility be based on the "calendar month before/calendar month after" concept now used generally in the FARs, since this provides greater flexibility and is easier to track under the systems already in use by most certificate holders. Several commenters also state that, as written, the proposal could require more frequent checks than under the present rules, since it requires an online evaluation at the midpoint between recurring training sessions.

*FAA Response:* The FAA agrees that the "calendar month before/calendar month after" concept in the present rules could effectively be used here, and this section of the SFAR (§ 6(b)(3)(ii)(A)) has

during a PIC online evaluation, the second in command and flight engineer also must be evaluated. Commenters question (1) what criteria would apply to the flight engineer and SIC evaluations; (2) whether this is a new requirement; and (3) whether the evaluator would have to have a flight engineer rating in order to evaluate the flight engineer.

*FAA Response:* This is a new requirement. Section 5(b)(3) of the SFAR states that evaluators must have appropriate training and evaluation to qualify a person to evaluate on a particular make, model, and series aircraft (or variant). AC paragraph 40(c)(3)(ii), as clarified, states that “an evaluator for an online evaluation will hold the airman certificates and ratings for all individual positions being evaluated.” The specific criteria for evaluating these other crew positions during the PIC online evaluation are not provided in the AC. This criteria will be developed by the certificate holder for FAA approval as part of the continuing qualification curriculum.

### **Certification under an AQP**

Two commenters object to the limitation stated in the preamble that initially certification under proposed SFAR § 5 would be limited to pilots who hold a commercial pilot certificate with an instrument rating. One commenter states that it understood that the SFAR would also include certification for flight engineers and aircraft dispatchers.

*FAA Response:* The rule language is not limited as assumed by the commenters. The preamble language referred to by these commenters states that initially certification under an AQP will be “limited to pilots who hold a commercial pilot certificate with an instrument rating, because the FAA has not yet developed appropriate criteria to serve as a basis for obtaining a commercial pilot certificate.” However, the preamble further states that, until these criteria are developed, the FAA will review any certificate holder’s request for commercial pilot certification under an AQP on a case-by-case basis. The FAA will also treat requests for flight engineer and aircraft dispatcher certification under an AQP on a case-by-case basis.

Proposed section 5(a) allows a person enrolled in an AQP to receive the required certificates or ratings under an AQP if certain requirements are met. One requirement is that “training and evaluation of required maneuvers and procedures under the AQP must meet minimum certification and rating criteria established by the Administrator. . . .”

Five commenters thought that the criteria should be established by the certificate holder and approved by the Administrator.

*FAA Response:* The language of § 8 of the final rule has been changed from required maneuvers and procedures “to knowledge and skills.” The revised language is more appropriate since the regulation also applies to flight engineers and aircraft dispatchers. Also § 8(a) has been clarified to show that the applicant for certification must meet minimum certification and rating criteria in parts 61, 63, and 65. The Administrator may accept substitutes for the practical test requirements of those parts, as applicable. Guidelines for developing substitutes for the practical test are set forth in Chapter 4 of the AC. The operator should show that substitute practical tests provide individual proficiency equivalent to or greater than that provided by the practical tests described in parts 61, 63, and 65 of the FAR.

One commenter expresses concern that the AQP would allow a flight engineer applicant who is the holder of a commercial pilot certificate with an instrument rating to satisfy the aeronautical experience or skill requirements of part 63 under an AQP and thereby reduce the requirements for a Flight Engineer certificate.

*FAA Response:* The concern expressed is not valid; any certifications that occur under an AQP will meet the aeronautical experience requirements of part 63 and performance standards equivalent to or greater than existing standards, thus ensuring that there is no reduction in safety.

is in favor of the requirement as proposed. Certificate holders who commented are concerned that the draft AQP AC and the proposed SFAR would mandate more restrictive flight simulator requirements than those currently in effect. In general, these commenters express confusion about the FAA's intention, particularly since the preamble to the proposed SFAR states that the advisory material on approval and evaluation of flight simulators and flight training devices will appear either in the AQP AC or in ACs being developed by the FAA. The draft AQP AC lists as guidelines for evaluation AC 120-40 and AC 120-45. One commenter requests that since the AQP AC references the other ACs, drafts of the others should be published for public review. Commenters also raise technical questions referring to specific portions of the draft AQP AC.

*FAA Response:* To clarify the FAA's intention, the final rule and the AC have been changed. Section 9 of the rule differentiates between: (1) flight training devices and flight simulators that will be used in an AQP for: (a) evaluation, (6) training sessions that assess whether an individual is ready for evaluation, (c) meeting currency requirements, or (d) Line Operational Simulations (LOS); and (2) training devices that are used for other than the purposes listed in (1) above.

Flight training devices and flight simulators to be used for any of the listed purposes must be evaluated by the Administrator and assigned a qualification level in accordance with the criteria set forth in AC 120-40, as amended, and AC 120-45, as amended.

Under these procedures, the FAA's National Simulator Program Manager (NSPM) will evaluate and, if warranted, recommend approval of a flight simulator or flight training device for a specific level of simulation. The recommendation will be submitted to the Air Carrier Training Branch for appropriate action. Final approval will include the level of simulation, the flight training maneuvers and procedures allowed for airman certification (training, currency, and evaluation), and the specific AQP in which it can be used. Levels of simulation that are hybrids of two levels contained in ACs 120-40 and 120-45 will be considered. All flight training devices and flight simulators that have been qualified and approved for a certificate holder's specific AQP use must also be part of, and maintained under, the certificate holder's continuing qualification program.

Training devices to be used in an AQP for other than the listed purposes must be approved by the Administrator. An applicant for approval of such a training device must identify the device by its nomenclature and describe how it would be used. If the device and its use are approved, the device must be part of a continuing program to provide for its serviceability and fitness to perform its intended functions as approved by the Administrator.

These training equipment requirements are for the most part a continuation of present policy on flight training devices and flight simulators. Training devices and simulators currently qualified as flight training devices and flight simulators by the FAA may be used in approved AQPs at their current qualification level without completing an additional qualification evaluation.

The FAA does not consider the inclusion of detailed charts in the AQP AC as a limiting factor on the overall process. An applicant can assume that, for the listed maneuvers and procedures, the FAA has indicated a range of classification levels for flight training devices or flight simulators that is acceptable. However, as set forth in the AQP AC, an applicant continues to have the option of requesting approval of alternatives, whether or not these alternatives are within the range set forth in the AQP AC charts.

#### **Incentive to Participate**

Several commenters point out that since participation in an AQP is voluntary, certificate holders will participate only if opportunity for innovation is allowed. These commenters are concerned that the proposed SFAR and AQP AC are too structured. One commenter stresses the need for clarity in the regulations; another expresses a concern that excessive data collection requirements would discourage participation.

their own program in ways that depart from the acceptable methods and procedures contained in the AQP AC. The FAA can approve such a program as long as the applicant can show that the proposed AQP is consistent with the AQP SFAR requirements and that any deviation from the guidance contained in the AQP AC is acceptable.

The AC has been revised to provide more detailed guidance for an acceptable AQP development and maintenance methodology that will allow for innovation through systematic development and approval of an AQP.

### Training Centers

Proposed SFAR §8 and Chapter 9 of the draft AQP AC establish requirements and acceptable standards for a certificate holder who uses a training center to conduct any of its AQP training, and requirements and acceptable standards by which a training center may obtain provisional approval of an AQP curriculum. Several commenters identify concerns with the proposed SFAR and AQP AC on this subject.

- One concern is that under the proposed SFAR only a certificate holder is eligible to obtain approval of an AQP, and many training centers are not certificate holders. One commenter requests that all references to a certificate holder throughout the SFAR include the additional words “or a training center that qualifies under this SFAR.”
- One commenter states that the requirements in proposed §8 (a) and (b) are basically directed at certificate holders, not training centers. Training centers that are not certificate holders need a prescribed method of training and qualifying airmen. Neither the existing regulations nor the proposed SFAR addresses this issue. Qualifying airmen employed by a training center by the same methods required for certificate holder airmen is not workable.
- According to one commenter, a non-certificate holder training center should be eligible for obtaining approval of extensions of its continuing qualification cycle. The proposed SFAR language limits extensions to certificate holders.
- One commenter thinks that qualifying training centers should be authorized to give AQP training only if the training is identified with a specific part 121 or part 135 certificate holder. Training in the certificate holder’s AQP should be required for instructors and evaluators employed by the training center. Also a certificate holder should be required to provide differences training for any differences between a training center’s training equipment and the certificate holder’s.
- One commenter expresses concern that since the proposed SFAR restricts eligibility of certificate holders who operate under part 135 to those who are required to have an approved training program under §135.341, all single-pilot certificate holders would be prevented from using an AQP. While such a certificate holder would probably not develop its own AQP, it might want to use a training center’s AQP curriculum for a particular aircraft.

*FAA Response:* Eligibility for an AQP is targeted to certificate holders who are required to have an approved training program under §121.401 or §135.341. Under §11(a) of the SFAR a certificate holder may arrange to have AQP training, qualification, or evaluation performed by a training center if the training center’s curriculum (segments and portions of segments) have been provisionally approved by the Administrator. The final rule makes clear that a training center may obtain provisional approval either independently or in conjunction with a certificate holder that is applying for an AQP.

A training center must apply for provisional approval and must show that it has: (1) a curriculum for qualification and continuing qualification for each instructor or evaluator employed by the training center; (2) adequate facilities for any planned training; (3) curriculums (segments or portions of) specific to make, model, and series aircraft (or variant), and specific to crewmembers or other positions. (§11(b)(1), (2), and (3)).

“certificate holder” or “operator.”

The proposed § 8(b)(1) (now § 11(b)(1)) has been changed by requiring an applicant for provisional approval to have a curriculum for instructors and evaluators, rather than an “approved” curriculum, since approval of a curriculum would be part of the provisional approval process.

The AC (Chapter 6) has been revised to provide guidelines to training centers in the methodology they should use to obtain provisional approval.

The SFAR does not require that each instructor or evaluator in a training center complete a full indoctrination program for each certificate holder for which the training center conducts training. Rather, a training center that provides training for a number of part 121 or part 135 certificate holders can develop a generic indoctrination program and specify the elements appropriate to each certificate holder. When the Administrator gives approval to a certificate holder to use a provisionally approved training center curriculum as part of the certificate holder’s AQP, the Administrator’s approval is equivalent to an “initial” approval under § 121.405 or § 135.325, as applicable.

The SFAR does not prevent a certificate holder that uses only one pilot in its operations under part 135 from developing a training program using the guidelines contained in the AQP AC (or using a training center’s AQP-type program).

To clarify the status of training centers and training center employees, the applicability sections of both parts 121 and 135 (§§ 121.1 and 135.1) have been amended to make it clear that training centers and their employees are subject to the applicable rules of these respective parts when they seek to and actually perform services for certificate holders. Thus, a training center and its employees would be in much the same status as a maintenance facility that provides service to a part 121 or part 135 certificate holder. However, the fact that a training center can bring itself and its employees within the jurisdiction of part 121 or part 135 by seeking provisional approval of a curriculum does not make the training center a certificate holder nor does it ensure the training center that its services will be sought by a certificate holder. Furthermore, as indicated previously, provisional approval of a curriculum does not ensure that curriculum will automatically be approved for use by a certificate holder, if a certificate holder applies to use that provisionally approved curriculum in its AQP. In most cases specific tailoring to the certificate holder’s needs will be necessary.

#### **Submission to District Offices**

Application for approval of an AQP (proposed § 7(a); final rule § 10(a)) and application for provisional approval of a curriculum by a training center (proposed § 8(a)(1); final rule § 11(a)(1)) must be made to the appropriate FAA Flight Standards District Office.

Three commenters question the need for referencing the Flight Standards District Office. One states that it confuses the process since the Administrator is mentioned also. The other states that internal FAA organizational structure is not normally addressed in the rule and that there is no reason for an exception in this case.

*FAA Response:* With respect to the approval authority, the commenters are technically correct. This authority is vested in the Administrator unless the Administrator delegates the authority to another person. Since “Administrator” is defined in 14 CFR part 1 to mean the Administrator “or any person to whom he has delegated authority in the matter concerned,” it is not necessary to state the level of delegation within the rule. However, there are numerous places (e.g., §§ 121.358(b)(1), 121.77(b) and its proposed successor § 119.41(c)) where the present regulations are more specific because the FAA wants to ensure that initial contact is with the appropriate FAA local office.



Ten comments were received on the qualification and continuing qualification requirements for instructors and evaluators. Issues raised and FAA responses are as follows:

- Section 2 defines an “evaluator” as a person who meets and maintains all of the qualifications under the AQP for an instructor . . .” Several commenters point out that this requires that an evaluator must always be a qualified instructor. However, air carriers use line check pilots and initial operating experience check pilots who have never been flight instructors or evaluators.

*FAA Response:* The FAA acknowledges that evaluator qualification requirements may not include all instructor requirements. For example, a person who has served as an instructor, an evaluator, or both in one make, model, and series aircraft could be an excellent evaluator in a similar aircraft without being fully qualified as an instructor in the second aircraft. Therefore, the rule and AQP AC have been changed to allow qualifying evaluators not otherwise qualified as instructors.

- Proposed section 3(b)(2)(ii) and (iii) set forth qualification curriculum requirements for instructors and evaluators. Several commenters requested that these requirements be broadened to include flight simulator, classroom, flight attendant, and dispatcher instructors. One commenter asks if the SFAR permits the use of flight simulator only instructors.

*FAA Response:* The SFAR language (final rule § 5(b)(2) and (3)) has been broadened to permit the use of flight simulator, classroom, flight attendant, and dispatcher instructors, provided the FAA has approved the qualification standards under an AQP and the instructor meets those standards.

- One commenter stated that Line-Oriented Flight Training (LOFT) for 3 person crews must use instructors and evaluators that are active line qualified airmen.

*FAA Response:* This rule and its accompanying AQP AC do not spell out prerequisites for instructors and evaluators conducting Line Operational Simulations (which includes LOFT). General guidance will be supplied in a Line Operational Simulations AC.

- One commenter says there is a problem with proposed § 3(c)(3)(iii) which requires instructors and evaluators who are limited to conducting their duties in flight simulators and flight training devices to have appropriate proficiency instruction in a flight training device or flight simulator on normal, abnormal, and emergency flight procedures and maneuvers. According to the commenter this would not teach an instructor or evaluator what he or she needs to know such as how to operate an instructor’s console in a jump seat position. Proposed paragraph (c)(3) also requires recurring instruction for instructors and evaluators once every 26 calendar months. As proposed this instruction would be in a flight simulator and flight training device on normal, abnormal, and emergency flight procedures. This commenter states that instructors would not need recurring instruction in procedures and maneuvers which they teach. The instruction itself should count as recurrent training.

*FAA Response:* The FAA does not agree that instructors and evaluators have no need for training under a continuing qualification program in the procedures that they instruct or observe as instructors and evaluators. There is always a need to be kept current in changes in procedures, or equipment, or both. With respect to the commenter’s concern that the SFAR does not require that the instructor or evaluator be trained in operating an instruction console in a jump seat position, the FAA points out that the SFAR does not duplicate all of the present FAR requirements. Sections 121.413 and 135.339 or alternative AQP requirements would ensure that each instructor or evaluator will be qualified in appropriate instruction or evaluation techniques, including operation of a console.

#### **Flight Instruction and Evaluation Tables**

The draft AQP AC presents flight instruction and evaluation tables in Chapter 4, “Qualification Curriculums.” Nine commenters raised questions about these flight instruction/evaluation events tables. Virtually all commenters question the appropriateness of using these tables to impose more restrictive requirements than are in the present rules. Several point out that if a carrier did not have the level

this area its application will be approved automatically. However, an applicant is free to propose utilization outside the charted ranges of qualification levels. FAA approval of utilization outside the charted range will depend upon adequate justification. The AC now clarifies this intent. In reorganizing the AC, the tables were moved to appendix C; they were also revised.

### **Acceptable Standards**

One commenter suggested that the term “minimum standards” throughout the AQP AC be replaced by the term “acceptable standards.” This commenter believes that the connotation of “minimum standards” “is not helpful to the FAA or the industry.”

*FAA Response:* The term “minimum standards” is used in the subtitle of Title VI of the FA Act and repeatedly throughout Title VI and is, the FAA believes, appropriate in describing the Federal Aviation Regulations. However, the AQP AC has been revised to use the term “acceptable” when appropriate to show that an applicant may obtain approval for an AQP that does not entirely follow the guidelines in the AQP AC but is an alternative equivalent to the guidelines in the AQP AC.

### **Proficiency Evaluation**

Six comments were received on proposed §3(c)(4)(i) which requires a proficiency evaluation for PICs, SICs, and flight engineers during each recurring training session. Three commenters request rewriting the paragraph because, as written, no training (including ground school sessions) could be conducted without accomplishing flight proficiency evaluations. They contend such a requirement might actually discourage frequent training sessions. Two commenters state that evaluations should be required on alternating training visits.

*FAA Response:* The language of the SFAR has been clarified. The requirement for evaluation in §6(b)(1) is tied to a certificate holder’s evaluation period within an approved continuing qualification cycle and not to the number of visits that a person may make to a training facility to participate in training sessions. That is, if a certificate holder elects to divide its recurring training into more than one training session within an evaluation period, the certificate holder would only be required to conduct at least one proficiency evaluation during an evaluation period and would not be required, as proposed, to conduct one following each training session. However, a certificate holder that conducts several training sessions within an evaluation period would not be prevented from conducting proficiency evaluations as part of each training session.

One commenter asks if this proficiency evaluation requirement is related to the instrument proficiency check in §135.297 or to the competency check required in §135.293.

*FAA Response:* The proficiency evaluation required by §6(b)(3)(i) and (ii) would most likely consist of elements of both regulations. The SFAR requires that elements to be included must be approved as part of the continuing qualification curriculum.

### **Recency Requirements**

Proposed §3(c)(3)(iv) states that continuing qualification for PICs and SICs under an AQP must include recency of experience requirements in accordance with §121.439.

Several commenters have questions about this requirement. One commenter thinks the requirement should be deleted since it is already in part 121. Another commenter asks if recency requirements of part 121 would apply or those required in an AQP. One commenter says that recency requirements are not presently tracked by training departments and so should not be part of training.

*FAA Response:* In the final rule the FAA has changed the recency requirement of §6(b)(4) by deleting the reference to §121.429 and adding the word “approved” to recency requirements. The reference to recency requirements has been retained to make it clear that compliance with these requirements

pilots maintaining continuing qualification under an approved AQP are considered to have met these check requirements.

### **Advisory Committee**

In the preamble to the proposed SFAR, the FAA states that it is considering establishing a training advisory committee under the Federal Advisory Committee Act. Three commenters state strong support for this idea. Two focus on the makeup of the committee. One states that it should be apolitical and the other states that it is essential that the line pilot be represented on the committee.

*FAA Response:* The FAA is in the process of establishing an advisory committee under the Federal Advisory Committee Act.

### **Curriculum Development**

Four commenters point out that the draft AQP AC Chapter 2 "Overview: Components of an Advanced Qualification Program" is not as helpful as it should be for developing an AQP curriculum.

*FAA Response:* The FAA has revised the AQP AC to provide more detailed guidelines for developing AQP curriculums. Chapter 2 of the AQP AC provides an overview and new Chapter 7 provides details on how to develop, implement, and maintain an AQP.

### **Principal Operations Inspectors and Approval**

A comment from a training center expresses concern about the approval process. The commenter believes that Principal Operations Inspectors (POI) might frustrate the application of the AQP concept, particularly for training centers that have received provisional approval and may be asked to alter that curriculum to the specific needs of a certificate holder by a POI. What was approved in the first stage may be disapproved by the POI at the second stage.

Another commenter states that the FAA should provide for a central authority to review and approve AQPs to assure standardization.

*FAA Response:* The FAA has established the Air Carrier Training Branch to ensure standardization of the AQP approval process. While AQP applications must be submitted to the Flight Standards District Office charged with the overall inspection of the certificate holder's or training center's operations, the application will be forwarded to the Air Carrier Training Branch for review and appropriate action.

The AQP AC has been revised to show procedures of the approval process in greater detail than the draft AC showed. The Air Carrier Training Branch will lead the review and analysis for each phase of the approval process. The review and analysis team will include an instructional system design specialist, air carrier operations specialists, a data management specialist, a civil aviation security inspector, an inspector from the National Simulator Program Staff, and the designee of the applicant's operations inspector. The review and analysis findings will be documented in a report with recommendations for acceptance or rejection to the Manager, Air Carrier Training Branch.

Review and analysis procedures will be the same for certificate holders and training centers, except that for training centers the development process ends in provisional approval until the provisionally approved curriculum is tailored to a certificate holder's operations and reevaluated for approval as the certificate holder's AQP.

At no stage of the approval process would a POI or any member of the team act alone to accept or reject an application for an AQP. The initial submission of required documents to a POI would not be forwarded to the Air Carrier Training Branch if it was incomplete or otherwise not in compliance with submission procedures in the AQP AC.

*FAA Response:* Having an indoctrination curriculum as part of an AQP is required. If crewmembers have already completed indoctrination, repeating the curriculum will not be required. As discussed earlier, the presence of a curriculum in an AQP does not mean that each module of the curriculum must be used in every instance. It means that the curriculum objectives have been included in the program and if those objectives have not already been accomplished by a trainee, they must be.

### **Comment Period**

Two commenters state that the 60-day comment period was insufficient. One of these commenters requests an additional 6 months and also requests that helicopter operations be considered in any future actions.

*FAA Response:* The 60-day comment period for the proposed SFAR was considered to be adequate given the previous consultation between FAA, other government agencies, and industry associations.

### **Beyond the Scope of the Notice**

A few comments were received that did not directly relate to the proposal. These comments included information on training and training equipment, as well as an objection to the increase in the use of 2-person flight crews.

### **Miscellaneous Technical Comments**

Several comments were received that request changes or clarifications of specific wording in the proposal. None of these comments would involve significant substantive changes. The FAA has considered these comments and, if appropriate, has changed or clarified the language accordingly.

### **Revision of the Advisory Circular**

Certain revisions necessitated by comments have led to a reorganization of portions of the AC and the addition of new material. In particular AC Chapter 7, "Five Phases of the Advanced Qualification Program," Chapter 8, "Approval Process for an Advanced Qualification Program," and Chapter 9, "Advanced Qualification Program Validation" provide more detailed guidance than that provided in the draft AQP AC.

### **Regulatory Evaluation**

The AQP is not mandatory; it is left up to the discretion of the individual certificate holder as to whether to adopt the AQP, and the FAA assumes that certificate holders will do so only if it improves their training effectiveness and safety or is otherwise in their economic interest. In fact, the limited available industry data suggests that benefits to the adopter could exceed costs. Therefore, it is assumed that this SFAR will not impose any additional net cost on the industry.

These regulations might make possible some costs savings in the air carriers' crew training programs. This may occur because: (1) training time would be related to the attainment of individual proficiency instead of set hours of training, and (2) the frequency of recurring training for PICs could be reduced thereby reducing training costs.

This section summarizes the full regulatory evaluation prepared by the FAA that provides more detailed estimates of the economic consequences of this regulatory action. This summary and the full evaluation quantify, to the extent practicable, estimated costs to the private sector, consumers, Federal, State and local governments, as well as anticipated benefits.

Executive Order 12291, dated February 17, 1981, directs Federal agencies to promulgate new regulations or modify existing regulations only if potential benefits to society for each regulatory change outweigh potential costs. The order also requires the preparation of a Regulatory Impact Analysis of all "major" rules except those responding to emergency situations or other narrowly defined exigencies. A "major"

to the full regulatory evaluation contained in the docket.

Since the AQP will build upon the current system, the FAA expects it to provide levels of safety equal to or higher than that provided by current regulations. If after evaluation by the FAA's Air Carrier Training Branch, the AQP is determined to provide a higher level of safety than the current system, the FAA may consider making it mandatory for certain classes of operators under a future rulemaking action.

The only FAA costs attributable to this SFAR are those of establishing and operating an Air Carrier Training Branch with three sections with assistance from appropriate Security and Hazardous Material personnel. This branch would assume the primary responsibility for the final review and analysis of air carrier training programs submitted to the FAA for approval under the provisions of the SFAR.

The Air Carrier Training Branch will gather and analyze data to verify and validate proficiency requirements and program qualifications and will monitor and evaluate the AQP. This staff will consist of three sections, each with a GM-15 manager, a total of 21 inspectors, specialists, and analysts, one GS-11 programmer, and two GS-6 secretaries. Field sections will share 5 workstations, a printer, plotter, and a telefax machine. The estimated annual cost of the new branch is \$2.2 million and a one-time cost of equipment of \$50,000.

The primary benefit expected of the proposed SFAR would be a reduction of the number of air carrier accidents in which crew coordination problems are a contributing factor. A review of NTSB aviation accident data reveals that during the past 20 years, there were 17 such accidents involving part 121 air carriers and 17 accidents involving part 135 air carriers. These accidents have resulted in 697 fatalities and 190 serious injuries and the costs of these types of accidents were \$1,329 million or about \$66 million per year.

Accidents in which crew coordination problems were a contributing factor appear to have occurred at a consistent rate during the past 20 years for part 121 departures; there were  $0.17 \pm 0.08$  accidents of this type per 1 million part 121 IFR departures. For part 135 operators, these types of accidents declined during the 70's and have been level during the 80's at  $.84 \pm .40$  accidents per 1 million part 135 IFR departures. To be conservative, the FAA used the upper bounds of these estimates (26 accidents per 1 million part 121 IFR departures and 1.24 accidents per 1 million part 135 IFR departures) to project the number of future accidents in which crew coordination problems are a contributing factor. Applying accident rates to forecasted departures for the period 1991 to 1995 the projected number of part 121 and part 135 accidents of this type are 9.0 and 17.9, respectively.

The economic losses due to these projected accidents would be substantial: \$609 million due to part 121 air carrier accidents and \$119 million due to part 135 air carrier accidents. The average annual loss during this period is estimated to be \$145 million a year. Accident trends will be closely monitored during the 5-year life of the SFAR to determine the impact of the AQP. AQP would also make possible some cost savings in the large air carriers' training programs. The limited available information suggests that large part 121 operators might have a crew training cost savings of \$81.9 million per year and that large part 135 operators would have a cost savings of \$5.1 million per year. Some training costs, however, would be increased by this SFAR. For the large part 121 operators, it is estimated that some training costs would be increased by \$15.5 million per year; for the part 135 operators, some of their training costs are estimated to be increased by \$652,000 per year. Both the large part 121 and the large part 135 operators could have an annual net cost savings as a result of this SFAR—\$66.4 million for large part 121 operators, and \$4.4 million for large part 135 operators. These cost savings and cost increases are explained in more detail in the regulatory evaluation.

Two benefit-cost comparisons are made in this evaluation in order to take into account the uncertainties regarding the effectiveness of this program at reducing accidents and the amount of participation of part 121 and part 135 operators in this program. In the first comparisons it is assumed that 100 percent of the large part 121 and part 135 operators will participate in this program starting in the first year. It is also assumed that this program is only 20 percent effective at reducing aviation accidents in which

\$54.5 million greater than the present value of the 5-year stream of costs which is \$88 million. In the second comparison, the present value of the 5-year stream of benefits is \$22 million which also exceeds the present value of the 5-year stream of costs which is \$10 million. Both of these ratios will be higher if the SFAR is more effective than 20 percent at reducing accidents in which cockpit crew coordination problems are a contributing factor. The FAA, therefore, determines that the benefits of the proposed SFAR will exceed the costs that may result from it.

### **International Trade Impact**

The proposal would have little or no impact on trade for both U.S. firms doing business overseas and foreign firms doing business in the United States. The proposals are likely to improve training efficiency and, therefore, reduce costs for U.S. air carriers.

### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily and disproportionately burdened by Government regulations. The RFA requires agencies to review rules which may have "a significant economic impact on a substantial number of small entities."

The proposals would impact those entities regulated by part 121 and part 135. The FAA's criteria for "a substantial number" is a number which is not less than 11 and which is more than one third of the small entities subject to the rule. For air carriers a small entity has been defined as one who owns, but does not necessarily operate, nine aircraft or less. The FAA's criteria for "a significant impact" are at least \$3,800 per year (1989 dollars) for an unscheduled carrier and \$53,400 or \$95,600 per year (1989 dollars) for a scheduled carrier depending on whether or not the fleet operated includes small aircraft (60 or fewer seats).

This SFAR does not impose any costs upon part 121 and part 135 certificate holders because the provisions in this SFAR are voluntary. It is left to the discretion of the certificate holders as to whether they will adopt the provisions of this SFAR. Those that do, will do so because adopting this SFAR will improve their operations and safety without a net increase in costs or because it is in their economic interest. The FAA believes that the larger air carriers are most likely to adopt the provisions of this SFAR and that the smaller air carriers would not. The smaller air carriers would not be able to adopt the provisions in this SFAR because they do not have the necessary facilities and equipment and because of the high turnover rate of their pilots. Flight training centers might alleviate the first problem. As a result of economies of scale, these centers could offer flight crew training programs that make maximum use of flight simulators and flight training devices to small air carriers at affordable rates. However, the high turnover rate of their pilots necessitates that small air carriers concentrate their pilot training on improving and maintaining pilot proficiency and discourages small air carriers from adopting AQP.

This SFAR imposes no additional cost on any small part 121 certificate holder nor any additional cost on any small part 135 certificate holder. Therefore, the proposed amendments to 14 CFR parts 121 and 135 will not have a significant economic impact on a substantial number of small entities.

### **Federalism Implications**

The regulations herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this regulation will not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

### **Conclusion**

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this regulation is not major under Executive Order 12291. In addition, the FAA certifies that this regulation will not

## **Part 108-9**

### **Flight and Cabin Crew Notification Guidelines**

**Adopted: June 11, 1991**

**Effective: July 17, 1991**

**(Published in 56 FR 27866, June 17, 1991)**

**SUMMARY:** This final rule amends the Federal Aviation Regulations and implements a statutory requirement for the notification of flight and cabin crewmembers of threats to the security of their flight. The Aviation Security Improvement Act of 1990 amended Title III of the Federal Aviation Act of 1958 and directed the Administrator of the FAA to implement guidelines for such notification. This amendment is needed to clarify an air carrier's responsibility to disseminate threat information to inflight security coordinators and establishes new requirements to disseminate this information to flight and cabin crewmembers. Air carriers are also required to provide any evaluation of the threat information and countermeasures to be applied. This action is intended to enhance civil aviation security.

**FOR FURTHER INFORMATION CONTACT:** Frederick P. Falcone, Office of Civil Aviation Security Policy and Plans, Policy and Standards Division, (ACP-110), Federal Aviation Administration, 800 Independence Avenue, SW., Washington DC 20591; telephone (202) 267-7296.

#### **SUPPLEMENTARY INFORMATION:**

##### **Background and Discussion of the Rule**

The Federal Aviation Administration (FAA) undertook this rulemaking to comply with a legislative mandate imposed by the Aviation Security Improvement Act of 1990 (the Act), Pub. L. 101-604, which was signed into law on November 16, 1990. Section 109 of the Act amended Title III of the Federal Aviation Act of 1958 (49 U.S.C. App. 1341-1358) and directed the Administrator of the FAA to develop guidelines for ensuring notification of the flight and cabin crews of an air carrier flight of threats to the security of such flight in appropriate cases.

On January 28, 1991, the FAA issued a notice of proposed rulemaking (NPRM) (56 FR 4322; February 4, 1991) to amend section 108.19 of the Federal Aviation Regulations, 14 CFR 108.19, to provide such guidelines. Under the proposed rule, upon receipt of a specific and credible threat to the security of a flight, a certificate holder would be required immediately to notify the ground and inflight security coordinators of the threat, any evaluation thereof, and any countermeasures to be applied. In addition, the certificate holder would be required to ensure that the in-flight security coordinator (which is the pilot in command under 14 CFR 108.10) notifies the flight and cabin crews of the same threat information.

The current system for evaluating and responding to threats to civil aviation is founded on the principle that it is best for intelligence experts to filter threat information before providing it to aviation personnel directly responsible for dealing with those threats. The air carrier's security experts, generally in consultation with the FAA and other government entities, evaluate threat information against specific FAA-established criteria to determine "specificity" and "credibility." (The terms "specific" and "credible"

### Discussion of Comments

The FAA received seven comments from entities representing regional airlines, major air carriers, pilots, and flight attendants. One comment was received from a member of the general public. No comments were received from Congress or other government agencies. The commenters who express some criticism of FAA's proposed rule address policy choices the FAA described in its NPRM, while not contradicting the factual bases for the FAA's choices. None of the commenters address the Regulatory Evaluation Summary, which concerns the economic consequences of the proposed rule as published in the NPRM.

One commenter has no criticism of the proposed rule and urges that it be adopted as a final rule.

Another commenter supports the essence of the proposed rule, but with one change. This commenter, the Air Transport Association, proposes that the pilot in command decide on a case by case basis whether the crew should be notified of threat information. The FAA does not accept this suggestion. As noted in the preamble of the NPRM, the proposed rule was intended to "eliminate any discretion on this issue, and require the carrier to ensure that the in-flight security coordinator provides the flight and cabin crew with threat information along with any evaluation and the countermeasures to be applied." (56 FR 4324) Adoption of this commenter's suggestion would be contrary to the interests of other crewmembers in receiving timely and accurate threat notification and runs counter to the spirit of the Act. Two commenters representing cabin crew members specifically endorse the FAA's policy choice on this issue.

A third supporting commenter urges adoption of the proposed regulatory language without change, and suggests the FAA consider appropriate amendments to the Air Carrier Standard Security Program (ACSSP), which was referenced in the NPRM. The FAA is currently evaluating the need to amend the ACSSP and may do so in connection with implementation of the final rule.

Three commenters accept the limitation in the proposed rule to credible threat information, but suggest that all credible information, even if non-specific, should be communicated to crewmembers. One of the commenters requests clarification of the FAA's definition of "specific." As explained in the NPRM, "specific" in this context refers to threat information that involves a well defined target or targets. A well defined target may include a single flight or series of flights spanning a particular period of time or geographic location. Specific threat information includes positive details describing an individual, airplane, aviation operation, or facility which suggests a particular knowledge of the intended target or targets not widely held by the general public.

If the scope of crew notification is not limited to threat information involving a well defined target, carriers would find it impossible to determine which threat information should be presented to the crew of a given flight. It would not be appropriate for carriers to relay all known, credible threat information to the crews of all flights, regardless of whether the threat information applied to that particular flight. Doing so would run the risk of inundating crews with a large quantity of irrelevant material, while obscuring the truly useful information.

This conclusion is supported by the legislation, which requires notification of the "crews of an air carrier flight of threats to the security of *such flight* in appropriate cases" (emphasis added). Congress did not direct the Administrator to develop guidelines for crew notification of threats to the security of *all* or *any* flights, and such notification would not be appropriate. However, carriers may provide notification to flight and cabin crews of any non-specific threats beyond the scope of this rule, if they deem it appropriate.

One commenter suggests that the FAA substitute the term "relevant" for "specific" in the language of the rule. As explained above, "specific" in this context includes information which is relevant to



threat information that has not been determined to be credible. As noted in the preamble, the Report of the President's Commission on Aviation Security and Terrorism supported limiting notification to credible threats. Six commenters, all of whom represent entities directly affected by the proposed rule, either affirmatively endorse or take no exception to this conclusion.

One of these commenters expresses the opinion that security information is comparable to weather or mechanical information, and proposes that all such information should be made available to the pilot to assist him or her in dealing with various eventualities. While the FAA is sensitive to this commenter's concerns, the agency does not agree with this suggestion. The FAA recognizes that a wide diversity of skills and complex training are needed in order to serve as a pilot in command in today's environment. A pilot's training and experience equip him or her to interpret and use a wide variety of information, including weather and mechanical data, in making crucial decisions.

The interpretation of intelligence-based security information, however, has not historically been within the purview of the pilot in command. Instead, responsibility for filtering and interpreting this information has rested with airline and government intelligence and security professionals. The FAA believes it is essential that threat information be filtered and assessed by those professionals if it is to be useful to the pilot in command and crew.

As explained in the preamble to the NPRM, the FAA agrees with the Report of the President's Commission that "the professionals who analyze threat information—the intelligence and law enforcement communities" should retain authority to determine the credibility of threat information (56 FR 4324). This commenter suggests that crews should be trained to perform this evaluation. The FAA believes this suggestion is not practical and would lead to an unproductive duplication of resources.

The rule as proposed will make the most effective use of both professional security and crew resources. This measure will help ensure that crews are thoroughly informed, so that they can focus their attention on possible security problems and perform their security-related functions with a heightened level of care and awareness.

One commenter criticizes the short period allowed for comment. This comment was considered although it was received after the closing date. The FAA issued the NPRM in response to a Congressional mandate to establish crewmember notification guidelines not later than 180 days after the enactment of the Aviation Security Improvement Act. The 30 day comment period reflects the time available to promulgate this expedited rulemaking.

After careful consideration of the comments and available data, the FAA has determined that air safety and the public interest require adoption of the rule as proposed.

#### **Regulatory Evaluation Summary**

This section summarizes the full regulatory evaluation prepared by the FAA that provides more detailed estimates of the economic consequences of this final rule. This summary and the full evaluation quantify, to the extent practicable, estimated costs to the private sector, consumers, Federal, State and local governments, as well as anticipated benefits.

Executive Order 12291, dated February 17, 1981, directs Federal agencies to promulgate new regulations or modify existing regulations only if potential benefits to society for each regulatory change outweigh potential costs. This determination is normally made on the basis of a regulatory evaluation. In this case, however, the Congress has already determined that this rule is in the public interest; that is, its collective public benefits outweigh its costs to the public, because Congress has required the rule to be promulgated (The Aviation Security Improvement Act of 1990: Public Law 101-604). Nevertheless, the FAA has prepared this conventional regulatory evaluation of the rule. The purpose of this evaluation is not to justify this rulemaking action (which has already been done through Congressional action), but to estimate potential costs and benefits (either qualitatively or quantitatively) to promote a better

### **Costs**

The rule is expected to impose a negligible incremental cost of compliance on U.S. air carriers. In addition, the rule is not expected to impose any monetary costs on the flying public. This assessment is based on the rationales contained in the following paragraphs.

The FAA expects the costs of the rule to be negligible based on two assumptions. First, the rule is assumed not to substantially increase the costs associated with the current flow of specific and credible security threat information between air carrier management and ground and in-flight security coordinators. This is because air carriers are already providing most of the security information required by the rule to ground and in-flight security coordinators on a routine basis.

The second assumption is that air carriers will not incur additional costs beyond current industry practice, as the result of ensuring that in-flight security coordinators notify flight and cabin crewmembers of all specific and credible security threats. This is also true of the requirement that air carriers provide any evaluation of the threat information and countermeasures to be applied. Disclosure of this information to flight and cabin crewmembers will impose only a negligible cost of compliance on air carrier operators because they already compile specific and credible security threat information on a routine basis.

Although the FAA contends that the rule will impose a negligible cost of compliance for the notification process, it recognizes that the potential for significant costs does exist in some cases. The reason for this assessment is that in-flight security coordinators (pilots in command) have the authority to request additional countermeasures if they consider them to be justified. The magnitude of this potential cost impact will depend on the extent to which flight and cabin crews expand the field of information available to security experts, who could then decide to take additional countermeasures based upon all security information available. These measures could include delaying scheduled flights from departing or requesting airborne flights to land for the purpose of conducting additional security checks or applying countermeasures.

The average time required to conduct a security check for narrow and wide-body aircraft on the ground ranges between 3 and 5 hours. If an aircraft is airborne and forced to land for a security check, there would be an additional cost for landing fees and delay time. Another cost factor (qualitative) associated with this potential situation could be the inconvenience imposed on passengers in the form of delays. According to one air carrier, the cost of an aircraft delay as the result of conducting additional security countermeasures could be as high as \$200,000 to over \$1 million (in 1990 dollars) per security check. The reader is cautioned that this range should not be considered precise and incorporates a number of general assumptions. Some of the assumptions include: the delayed aircraft is the only one connected to departures from other areas, additional flight crews may be needed due to time and duty limitations, lawsuits may be filed by some passengers, costs may be incurred for another slot at the gate, plus a multitude of other factors.

Over the past 10 years, on average, air carriers have received between 650 and 750 security threats annually. An estimated 600 to 700 of these threats were anonymous that were not determined to be specific and credible. None of these anonymous threats resulted in an explosion or the discovery of a bomb. During the same period, on an annual basis 30, out of 50 credible aircraft security threats were specific. To date, there is no evidence of an explosion or discovery of a bomb relating to a specific and credible security threat.

### **Benefits**

The final rule will generate benefits by ensuring that the current high level of aviation safety remains intact. Under the rule, air carriers will be required to provide all credible and specific security threats, as well as any evaluation thereof and countermeasures to be applied, to the ground and in-flight security coordinators. In turn, the in-flight security coordinator will notify the flight and cabin crewmembers.

## **Conclusions**

The rule will impose only negligible incremental costs on air carriers and could result in benefits to the aviation community and flying public in the form of ensuring that the current high level of aviation safety remains intact. Therefore, the FAA concludes that the rule is cost-beneficial.

### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) was enacted to ensure that small entities are not unnecessarily and disproportionately burdened by Government regulations. The RFA requires agencies to review rules that may have "a significant economic impact on a substantial number of small entities." The small entities that could be potentially affected by the implementation of this rule are scheduled air carrier operators for hire that own but do not necessarily operate nine or fewer aircraft. A significant economic impact for these small entities will be an annualized cost that exceeds \$105,000 (in 1990 dollars). Since the incremental cost of compliance is expected to be negligible (less than \$105,000 annually for each air carrier operator), the FAA has determined that the rule will not have a significant economic impact on a substantial number of small entities.

### **International Trade Impact Assessment**

The rule will neither have an effect on the sale of foreign aviation products or services in the United States, nor will it have an effect on the sale of U.S. products or services in foreign countries. This is because the rule is expected to impose only negligible costs on U.S. air carrier operators. This action will not result in a competitive disadvantage to U.S. carriers engaged in international flight operations.

### **Federalism Implications**

The rule will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this rule will not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

### **Conclusion**

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this regulation is not major under Executive Order 12291. In addition, it is certified that this regulation will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This regulation is considered significant under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). A regulatory evaluation of the regulation, including a Regulatory Flexibility Determination and International Trade Impact Analysis, has been placed in the docket. A copy may be obtained by contacting the person identified under "For Further Information Contact."

### **The Amendments**

In consideration of the foregoing, the Federal Aviation Administration amends part 108 of the Federal Aviation Regulations (14 CFR part 108) effective July 17, 1991.

The authority citation for part 108 is revised to read as follows:

*Authority:* 49 U.S.C. 1354, 1356, 1357, 1421, 1424, and 1511; 49 U.S.C. 106(g); Sec. 101 *et seq.*, Pub. L. 101-604, 104 Stat. 3066.

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for an carrier and airport employees engaged in security-related activities. The requirements in this rule respond to the Aviation Security Improvement Act of 1990. The requirements are intended to enhance the effectiveness of U.S. civil aviation security systems in providing safety and security from terrorism and other criminal acts against civil aviation to passengers of U.S. air carriers.

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## **SUPPLEMENTARY INFORMATION:**

### **Background**

The destruction of Pan American World Airways Flight 103 on December 21, 1988, by a terrorist bomb while in flight above Lockerbie, Scotland, resulted in the loss of 270 lives and remains the worst aviation disaster of its kind in U.S. civil aviation history. The U.S. Government's response to this tragedy included the establishment, by President Bush on August 4, 1989, of the President's Commission on Aviation Security and Terrorism (Commission). The Commission was tasked with making an assessment of the overall effectiveness of the U.S. civil aviation security system.

The Commission, in its final report filed on May 15, 1990, made a number of recommendations to the President for improvement of the U.S. civil aviation security program which is administered by the FAA's Office of Civil Aviation Security. Many of the recommendations addressed enhanced security procedures that had been or subsequently were implemented by the FAA on its own initiative. Others required legislative action. Subsequent to the Commission's report, Congress enacted the Aviation Security Improvement Act of 1990 (Pub. L. 101-604), which was signed by President Bush on November 16, 1990.

Section 105(a) of the Aviation Security Improvement Act amends section 316 of the Federal Aviation Act of 1958 (Pub. L. 85-726) (FA Act) by adding a new subsection "(h)," captioned "Employment Standards." This subsection directs the FAA Administrator to prescribe minimum standards for the hiring and continued employment of air carrier and airport security personnel, including contractor personnel. The prescribed standards must address training and retraining requirements, language skills, staffing levels, and education levels. The FAA's response to this mandate resulted in a notice of proposed rulemaking (NPRM), Notice No 91-9 (56 FR 13552; April 2, 1991). In the NPRM, the FAA proposed that parts 107 and 108 of the Federal Aviation Regulations (FAR) (14 CFR 107, 108) be amended by adding minimum employment standards as required by the Aviation Security Improvement Act. Part 107 prescribes FAA airport security regulations and part 108 prescribes airplane operator security regulations. The proposed rule included general and specific security standards. Security-sensitive information was shielded from disclosure. Such security sensitive information routinely is restricted to non-public security programs required of airport operators under § 107.3 and air carriers under § 108.5 of the FAR. These security programs are protected from disclosure by the provisions of part 191, which implements section 316(d)(2) of the FAA Act (49 U.S.C. 1357(d)(2)).

### **Discussion of Comments**

As of May 9, 1991, 42 commenters had responded to Notice 91-9. Commenters included 23 airport operators and airport authorities, 10 employee groups, 3 public interest groups, an air carrier, a medical laboratory, and 4 individuals. The comments are summarized and addressed below.

#### *Section 107.7—Changed Conditions Affecting Security*

This final rule amends § 107.7 as proposed in the NPRM by adding a requirement that airport operators notify the FAA when the person designated as Airport Security Coordinator (ASC) changes. Five comments to the provisions in the NPRM were received, three of which supported the proposal. Two commenters stated that it would be burdensome for airport operators to notify the FAA whenever

clear that the FAA considers a change in the designation of Airport Security Coordinator to be a changed condition affecting security. The FAA must know the name of each person serving in the ASC position to ensure that immediate and effective communication with the responsible person can be made. Obviously, if the ASC designation is changed, communication between the airport and the FAA could be adversely affected unless the FAA is promptly notified of the change.

Neither is the FAA persuaded that merely designating a job title (such as "facilities manager") is adequate, since at smaller locations the position may be only part-time. Confusion may arise over whom to contact unless a specific person is identified. Most commenters on the proposal supported this requirement as a reasonable and logical addition to § 107.7.

Regarding the commenter's concern that it would be burdensome to communicate ASC changes to the FAA, airport operators are already responsible for keeping the FAA informed of changed conditions affecting security under the existing language of § 107.7. Since changes in the designation of an ASC would not be expected to be frequent, it should not be burdensome for the airport operator to report such changes to the FAA. Lastly, such minor changes should not necessitate reprinting and distributing an entire airport security program document. The inconvenience of distributing updated information would be minimized if the security program documents are designed to permit for the ready removal or replacement of individual pages or sections without disturbing the entire document.

#### *Section 107.25—Airport Identification Media*

This final rule establishes standards for the issuance and use of airport identification media. The proposal focused on the training of persons issued identification that permits unescorted access to certain airport areas. The final rule has been revised in several respects in response to comments received.

Since there were a large number of comments on this section, the following discussion is organized by several subtopics: Security Identification Display Area (SIDA), applicability time frame for compliance, curriculum, individual accountability, records, and cost.

#### **Security Identification Display Area (SIDA)**

The FAA has adopted the definition of SIDA as it was proposed in the NPRM. The final rule defines the SIDA as "any area identified in the airport security program as requiring each person to continuously display an airport-approved identification medium unless the person is under airport-approved escort."

Six commenters, including the Airline Pilots Association (ALPA) and the National Air Transport Association (NATA), focused on the definition. Most of the comments expressed some confusion about how SIDA related to the Air Operations Area (AOA) defined in § 107.1(b)(2). Two commenters stated that the SIDA would not necessarily be consistent with AOA, allowing stricter regulations to be directed at the air carrier risk areas and greater flexibility in general aviation areas. ALPA stated that SIDA should not encompass the sterile concourse. NATA recommended that airports be given flexibility in defining SIDA "so that alternative systems may be allowed in areas of the airport where general aviation operations are conducted."

ALPA had a related comment on use of the term "airport-approved" in the SIDA definition. It stated that despite the explanation in the preamble of the distinction between "airport-approved" and "airport-issued," FAA field personnel and airport operators might interpret the language of the rule to mean that only "airport issued" identification is acceptable for unescorted access to the AOA. ALPA recommended clarifying the intent in the rule by using "airport or airline-approved security identification medium."

*FAA Response:* The definition of SIDA in the final rule remains unchanged from the proposal. As was explained in the preamble of the NPRM, the SIDA at any airport generally would include

The proposed SIDA definition purposely allows for the flexibility that the comments mention. While the SIDA generally would encompass the AOA, the definition would allow for site-specific provisions at those airports where general aviation and other areas are positively separated from air carrier operations, and appropriate security provisions acceptable to the FAA are in place.

The FAA does not agree with the comment that the term "airport-approved" will be misinterpreted to mean "airport-issued" by FAA field personnel or airport operators. Airport security programs already explain that the term "airport-approved identification media" could include media that is not necessarily issued by an airport. Examples of such media include FAA Form 8000.39, and air carrier identification displayed according to agreements with the airport. Thus, FAA field personnel and airport operators are well aware of the long accepted distinction.

### **Applicability**

The proposed training requirements which are adopted unchanged in the final rule apply to any person who is issued airport operator identification media providing unescorted access to the SIDA. Nineteen commenters addressed the scope of applicability. Most of the commenters were airport operators or airport associations. The ATA, NATA, and National Weather Service also commented.

Comments from airport operators and associations stated that they did not understand their area of responsibility for training. These commenters wanted to know whether they would be responsible for tenant-employee training, the training of any individual they authorize to have access to secured areas, and whether they could require air carrier employees to attend airport training.

The ATA stated that it will be costly to airlines to pay for employees to attend duplicate airport training. Their concern was that air carrier personnel performing development, construction, or inspection duties might have to go through redundant training, and in their comment requested that such personnel be excluded from the rule.

NATA requested that training standards for general aviation area users and fixed-base operators (FBO) and FBO customers be no more than a verbal briefing with a handout of written materials. It also requested that an industry task force work out standards for fixed-base customers and FBO employees.

One commenter was concerned about the interrelationship between SIDA training and other possible rule changes, specifically future rulemaking related to criminal background checks of individuals with unescorted access to air carrier aircraft. The commenter wondered if individuals should receive SIDA training before the criminal background checks are completed or would this be giving out security information improperly.

One commenter referred to the preamble statement that limits applicability to only those individuals receiving airport-issued identification, thereby excluding certain FAA personnel and air carrier personnel who hold airport-approved media. The commenter stated that to be secure, all individuals with access to secured areas should have the required training and identification, including U.S. Customs officials.

*FAA Response:* As previously noted, airport-approved identification media include not only identification media issued by airport operators but also identification media issued by other entities that an airport operator accepts for unescorted access into the SIDA. Examples of identification media normally approved for use at airports include identification media issued by the FAA and air carriers. Under the proposal, the airport only would be responsible for training individuals, regardless of their employers, to whom it issues identification media which provide unescorted access privileges. The airport operator is not responsible for training individuals who obtain identification media from other entities. Training for these other individuals is the responsibility of the issuing entities. This training can be accomplished through a variety of methods such as through local agreements, air carrier security programs, or under internal FAA guidance in the case of individuals having access authority via FAA Form 8000-39.

In response to the NATA comment and others concerning general aviation areas and FBO's, the rule provides flexibility in defining the SIDA so that FBO and general aviation areas need not be included within the definition, given FAA approval of other security provisions.

Regarding the interrelationship of SIDA training to possible criminal background check requirements, the FAA will determine at the point that criminal background checks are required what restrictions, if any, should be imposed on temporary issuance of unescorted access media. However, identification media providing unescorted access to the SIDA, whether temporary or permanent, may not be issued to anyone who has not undergone the training in accordance with § 107.25.

An airport-operator could condition its approval of identification media issued by other entities on the provision that those entities provide adequate training for their personnel. Such training could be provided by the airport-operator or through a training program of equivalent quality provided by another organization.

### **Time Frame for Compliance**

The NPRM proposed the following phased compliance schedule:

(1) After October 1, 1991, an airport operator may not issue identification media to anyone who has not successfully completed the required training.

(2) By March 1, 1992, at least 50 percent of all persons who possess airport-issued identification must have successfully completed the required training.

(3) After July 1, 1992, an airport operator may not permit anyone to possess any airport-issued identification unless that person has successfully completed the required training.

Nine commenters addressed the compliance time for the required training. Commenters believed that the time frame is not realistic, particularly the October 1, 1991, deadline. They stated that the deadline is too burdensome and too difficult to comply with. A few commenters requested that the training time schedule be coordinated with implementation of an access control system so that training would not have to be conducted by the deadline and then repeated once an access control system is in place. One commenter stated that since no curriculum has been developed, the October 1 deadline is unrealistic. One commenter stated that in recent months administrative and operational security forces have been stretched to excessive workload limits. In addition, most major airports are implementing new § 107.14 on access control systems. Adding another requirement with a short deadline is not in the best interests of the aviation industry or the traveling public. Furthermore, for many airports, budgets for fiscal year 1991 have already been established without including any of the costs associated with this rulemaking.

*FAA Response:* In an effort to be responsive to the views of the commenters, while at the same time providing for definitive and timely improvements in security at the nation's airports, the FAA has revised the phased training schedule to provide additional time for compliance. In the final rule, a new January 1, 1992, deadline provides an additional 3 months over the proposed deadline by when all airport operators will be required to train employees prior to issuance of identification media for the first time. Under the revised schedules, at least one-half of the individuals in possession of such identification media prior to January 1, 1992, will have to be trained by October 1, 1992, with the balance of training to be completed not later than May 1, 1993.

The training requirement under this section is a one-time requirement. The rule does not establish any type of retraining requirement. If an airport does not have its § 107.14 access control system in operation when SIDA training commences, then the airport operator may find it necessary to provide supplemental training on use of the new access control system when it becomes operational. Note, however, that the fundamental nature of the training required under § 107.25 should be readily compatible with and applicable to any access control technology adopted into an airport security system.

is necessary. For example, the Port Authority of New York and New Jersey stated that at Kennedy International Airport each individual issued a new identification (as part of their new automated system mandated by § 107.14) must acknowledge receipt of the airport's general security regulations. It stated that this procedure should qualify as meeting the proposed training standard.

The other category of commenters expressed the opinion that the proposal inadequately detailed the content of the curriculum that would be required. Most of these commenters requested a more detailed curriculum or guidance on developing such a curriculum. According to these commenters, the proposed curriculum was too basic. It did not specify the number of hours required. It was silent on issues, such as concealment of weapons, sabotage, profiles, screening equipment, and levels of security. They said that the minimum curriculum was too general to establish a standard and that it did not allow for public comment on the details of a curriculum, and that costs could not be accurately anticipated. APANA commented that "by failing to establish uniform, minimum standards in a public forum . . . the proposed rule fails to meet Congress' mandate contained in section 1357(h)."

The commenters raised the following questions about the proposed curriculum:

- (1) How many hours?
- (2) Is it annual or otherwise recurring?
- (3) Is it formal classroom training or can video tapes be used?
- (4) What "other topics" might be necessary and for whom? When will these other topics be identified?
- (5) Who is responsible for the training—tenants or airports?

The City of Chicago asked if video training of individuals would be acceptable in light of the number of people who would need training.

The Indianapolis Port Authority proposed that a badge recipient be given a training document and verbal explanation of the use of the badge when he or she is given the badge.

The State of Alaska stated that, as part of its photo identification system, at small airports subject to part 107 it provides a 1½-page document that explains the system. When signed by the badge holder, the document becomes a contract between the badge holder and the airport.

NATA recommended that fixed-base customers at airports receive a verbal briefing with written materials on airport security regulations, the access system, and limitations that would apply. NATA also recommended that developing a set of training standards for FBO's and customers at FBO's be assigned to the FAA's Aviation Security Advisory Committee.

One commenter requested more information on the meaning of "associated law enforcement." The National Weather Service (NWS) stated that it does not want its people trained in "challenge procedures" or in any way involved in challenging. (See the additional discussions relating to the NWS' comments, below.)

*FAA Response:* The FAA disagrees with the comment that not enough detail on curriculum content or development was disclosed in the proposed rule. To the contrary the full range of curriculum content with specific topical areas was set out in the NPRM and appears in the final rule. Those persons required to display airport-issued identification, for the most part, are not security professionals and the training for them is not expected to involve any more than preparing them to function in a security-sensitive environment. Thus, there is no need for them to receive training on screening equipment, sabotage, or profiles. These are separate, more detailed training topics for people whose job function is to provide security.

Due to the individual configuration, size, types of operations, extent of risks, and law enforcement procedures of each airport, it is not possible to set out in the public rule every aspect of each training



the program, the training, and the program will be sufficient at most airports. The FAA does not agree with the commenters who believed that inadequate hours and cost-per-hour data were provided in this rulemaking.

In response to queries as to whether video tapes or oral briefings may be used in providing training, the rule does not prohibit the use of any particular training methods; however, prior to conducting training the anticipated method of instruction and curriculum must be approved by the FAA as a part of the airport operator's security program.

In this regard, the FAA recently produced and distributed to most airports affected by this rulemaking, a series of videotapes entitled "Airport Security: A Team Approach." One segment of that series specifically addresses security in the AOA and most of the required major topics. Use of this video tape could constitute a major component of an acceptable training program.

The curriculum set out in the NPRM and adopted in the final rule is intended to make employees having unescorted access privileges to the SIDA aware of their responsibilities regarding their individual role in airport security. Such basic concepts as not loaning identification media to others, reporting lost or stolen identification to the appropriate authorities immediately, and the critical nature of and correct procedures for exercising a challenge when required are viewed as essentials. Written material may be used to supplement oral or video presentations on these subjects. However, language has been added to § 107.25(e) of the final rule to clarify that an opportunity for attendees to ask questions must be provided.

In response to other commenters, the requirement for training on associated law enforcement support is an important part of knowing what to do if an individual without proper identification media is encountered in a secure area. Law enforcement support requirements are specified in §§ 107.15, 107.17, and 107.19.

In response to the comment that these requirements should come under the authority of the Administrator of the FAA, the agency is guided by the Aviation Security improvements Act of 1990. That legislation created the position of the Assistant Administrator of Civil Aviation Security and makes the person holding that position responsible for implementing and enforcing these regulations. In carrying out these responsibilities, this person is subject to the Administrator's direction and authority.

Finally, the U.S. Department of Commerce (National Weather Service) objected to "any attempt to characterize its employees who regularly perform their duties in areas within the airport controlled for security purposes as 'security personnel.'" The objection deals especially with the obligation to challenge aspect of the training required under § 107.25.

Historically, the challenge procedure has been a responsibility shared by all individuals with unescorted access privileges of airports having security programs in accordance with § 107.3(b). Since it is unreasonable to expect law enforcement officers to be present at all times throughout the airports' controlled areas, a supplemental method, i.e., the challenge procedure, was developed.

Challengers are not expected to place themselves or others in situations they consider dangerous. Rather, they are expected to contact law enforcement authorities under appropriate procedures when a threat is perceived. The FAA sees no valid reason why all persons having unescorted access to a SIDA should not be trained on and be expected to carry out the challenge procedures at those airports where such a procedure is a part of the security plan.

#### **Individual Accountability**

Proposed § 107.25(f) prohibits a person from using any airport-issued identification media to gain access to an SIDA unless the media was issued to that person by the appropriate airport authority. One comment was received on paragraph (f). It supported the requirement if it holds the individual responsible directly to the FAA.

Proposed § 107.25(g) requires an airport operator to maintain a record of all training given to each person under this section until 180 days after the termination of that person's unescorted privileges.

Five commenters addressed the proposed recordkeeping requirement. All commenters believed that the proposed requirement will be burdensome. One commenter was concerned that the FAA may use the records to hold airports accountable for security breaches. Another commenter was concerned that the records will be held by the airport rather than the employer of the individual and that the airport may be liable for releasing this information. One commenter questioned the benefit of the requirement to the airport operator. Will the record of security training for an individual serve as a defense for an airport operator for a purported part 107 violation?

One commenter referred to this requirement as an "administrative nightmare" because of the high turnover rate and the 6-month retention. The commenter requested allowance to purge the data base after the individual's unescorted access privileges are terminated. Another commenter said the 180-day retention requirement will overload an already strained recordkeeping system.

*FAA Response:* This provision is adopted as proposed. As stated in the preamble of the NPRM, records must be maintained to document compliance. Such records would provide vital information regarding training during investigations of security-related matters. Since airport operators are required to provide training, it is consistent to require that they also maintain records of training. This requirement is not intended to be an administrative burden. It is not expected that such basic information as the name, date, place and extent of training received by an individual would be time consuming to compile or take too much space in a data bank. These records would greatly improve the management of the airport security system and should not include anything other than training record details. They should not be accessible to anyone not having a bona fide "need to know" training record details.

The requirement to keep records is not intended to serve as a defense for any purported part 107 violation. However, a charge that required training has not been provided might be refuted by current and accurate records to the contrary. In this respect, compliance with the record requirement is a great benefit to the airport operators.

The 6-month retention is primarily for investigation purposes. The FAA believes that, since each record contains only a minimal amount of information, the 6-month retention creates only a slight burden on the operator.

#### Cost

Ten comments addressed the cost of § 107.25. Commenters stated that the requirements would be a burden and that the FAA's estimate for the cost of training is low. Commenters asked if the FAA will reimburse airports, if the FAA will make grant money available, or if Airport Improvement Program funds will pay for the training. One commenter questioned how the FAA estimates \$4,405,000 without having determined guidelines for the number of hours and methods of training. One pointed out that the cost is ongoing, not one-time.

Two commenters provided specific figures. Training at Tampa International Airport would be for 4,000 employees with an annual turnover rate of 1,500. The required training would necessitate one additional manager and support facilities for a cost of \$60,000 annually. Man-hour allocations for all employees to be trained would be \$180,000.

Raleigh-Durham expects the cost to be \$7,889,275 over 10 years or in excess of three-quarters of a million dollars per year. These figures are based on 3,500 persons for a 6-hour class having access to the secured areas. Initial curriculum development is estimated at \$141,275; updated over 9 years at \$472,500; materials at \$500,500 for 10 years, labor costs for the class at \$475,000, and record maintenance at \$6,300,000.

not anticipate the availability of funding grants of any kind to cover the cost of providing training under this rule.

#### *Section 107.27—Evidence of Compliance*

This section proposes that airport operators provide the FAA with evidence of compliance when requested. This should not require airport operators to institute new or expanded recordkeeping systems beyond those required elsewhere in part 107. The final version of 107.27 is intended merely to guarantee FAA access to existing records when necessary.

Eight commenters addressed this proposal; one, the AFA, supported it. The remaining commenters represented airport operators who felt that the administrative burden and cost of this proposal (e.g., additional storage space and staff) will be excessive and will compete with funds for improving the safety and efficiency of airports. Some commenters stated that the airport operator should not be responsible for documenting and maintaining records on airline employees who disregard security rules. Such documentation should be the responsibility of the airlines.

One of the commenters asked, “Is the record retention requirement really necessary under the absolute liability standard now so unfairly imposed by certain segments of the FAA upon airport operators facing liability for the culpable conduct of independent third parties?”

Another commenter said that it is unrealistic to require airports to provide the FAA with immediate access to training records; most airports do not have 24-hour or weekend and holiday pass and identification coverage for the offices where security records are maintained. Another commenter said that FAA access to security records has never been a problem; therefore, the proposed section is unnecessary.

*FAA Response:* The concerns expressed by airport operators about the administrative burden of documenting and maintaining records to show employee compliance with security programs do not relate to the intent of this section, which deals with airport compliance with security programs not employee compliance. Airports must show evidence of compliance with security programs by making records available to the FAA on request. The kinds of records that relate to the security program are records on security training (as required under proposed § 107.25(g)) and records on law enforcement actions (as required under existing § 107.23). The airport may physically keep these records or individual entities may keep records for their employees. Either way the airport is responsible for knowing where the records are and for providing immediate access to them. The FAA prefers that the airport physically maintain the records, but it is not requiring airports to do so. Law enforcement records subject to FAA review under 107.23 may be kept in accordance with local or state requirements, so long as the records are available to the FAA upon request.

The comment regarding airport operator liability for security violations committed by third parties represent a justifiable concern. However, the intent of the proposal, which has been adopted without change in the final rule, is to provide reasonable assurance that current and accurate information regarding airport operator compliance with security rules and directives is maintained and available for any reason. This requirement is not intended to place nor excuse liability for security violations.

In terms of FAA access to records, this rule does not require that records be made available on a 24-hour basis. Rather, records should be available during normal work hours, during FAA inspections or during an investigation, in which case immediate access may be required.

#### *Section 107.29—Airport Security Coordinator*

This section proposes that airport operators appoint an Airport Security Coordinator (ASC) to act as a liaison between the airport and the FAA. The ASC would oversee airport security functions, e.g., records maintenance, compliance, and program development and training.

ATA stated that, if an ASC position were to be created, the position should be limited to part 107 responsibilities. ATA maintains that if the ASC were to exercise air carrier responsibilities under part 108 as well, then "air carriers would be exposed to a welter of uncoordinated security demands, which would contradict the efforts of the air carrier industry and the FAA to assure that security matters be dealt with in a uniform fashion."

*FAA Response:* The FAA disagrees with the commenters' concerns that the ASC position would be in addition to other security positions and would thus be costly and burdensome. As stated in the preamble of the NPRM, most ASC positions are not expected to be either full time or to require additional positions at most airports. Rather, the ASC would most likely be someone who is already fulfilling some security related-functions, either as his or her sole duties or as a collateral assignment. Significantly, the ASC position is not intended to embody any authority or responsibility which does not already fall to airport operators under the current part 107 program.

The requirement to designate an ASC is intended, in part, to provide program oversight and continuity. Further, as the airport operator's recognized contact point for security matters, the ASC can contribute toward a more effective FAA-industry network, both locally and nationally.

Regarding ATA's comment that uncoordinated security demands could ensue if the ASC were to exercise air carrier security responsibilities, the rule is clear that the ASC's only role is to serve as the airport operator's primary security contact with the FAA. FAA does not anticipate the ASC as having an operational or oversight role regarding part 108 requirements.

In terms of the "degree of designation" and "changes of said designation" of the ASC, the FAA's position is that the name of the ASC (or name of a new ASC) should be reported to the FAA to ensure that the FAA has contact with the correct person. As already discussed in the FAA's response to comments on § 107.7, as well as above, the ASC is likely to be filling several security positions; therefore, the FAA would need the name of the current ASC to make appropriate and timely contact.

In considering the comments received which related to this aspect of the ASC designation, the FAA also concluded that it is appropriate to require that the designation include a method to contact the ASC on a 24-hour basis. In order to be acceptable, the designation should include such information as home and work telephone numbers, and where appropriate, pager and facsimile machine numbers. The FAA will permit designation of one or more alternate ASC's to be contacted in the event of the unavailability of the ASC.

Regarding the comment that the FAA should provide more definition of the ASC's duties and responsibilities, the FAA already described in the preamble of the NPRM the functions appropriate to the ASC. These functions include records maintenance, compliance oversight, program development and consistency, training, and communication with the FAA, airport tenants, and others. The FAA did not set specific standards for the ASC because that role will differ from one airport to another, based on such factors as airport size, organizational structure, and existing security program features. Regarding the same commenter's point that the FAA should determine the effect of § 107.14 (access to secured areas of airports) on the ASC position, the FAA does not see the need to relate each individual section of part 107 to the ASC. The ASC serves as the primary contact for all part 107 security matters. The FAA expects that the ASC's will work closely and cooperatively with their FAA and tenant counterparts to facilitate the effective implementation of the full range of security provisions.

The intent of § 107.29 is to ensure that there is a primary contact person who oversees part 107 security functions. As mentioned in the preamble of the NPRM, there are positions under part 108 which are already intended to serve the air carriers in a similar capacity, i.e., the Ground Security Coordinator and Inflight Security Coordinator under existing § 108.10. Ideally, the ASC's should serve as the liaison or contact point for their air carrier counterparts as well as for communications with the FAA. Additionally, the ASC's will be in a position to seek resolution of security-related issues

108.17 said that the proposed rule will limit the number of security duties per individual, but did not specify the limit.

ALPA said that the proposal would duplicate what is already required in FAA-approved security programs pursuant to § 108.5. ATA stated that requiring additional layers of personnel will not automatically enhance security and that this proposed section does not reflect demonstrable security needs.

The Regional Airline Association (RAA) said that additional staffing at regional airports may not be warranted due to the lower numbers of passengers passing through security checkpoints which allows for more effective screening of all persons. The costs of full-time supervisory coverage would be high for regional airports. RAA recommended that the FAA make this staffing requirement applicable only to airports enplaning more than 500,000 persons annually.

*FAA Response:* The final rule is unchanged from the proposal. The FAA is convinced that improved supervision is critical to enhanced screening effectiveness. Section 108.9(d) requires air carriers to staff their security checkpoints with supervisory and non-supervisory personnel in accordance with standards specified in the air carriers' security programs. The actual staffing requirements would be in the security program and are not set out in the public rule because the staffing requirements at a particular checkpoint must be specific to the peculiar needs of the location involved. Specific staffing requirements are related to airport activity and threat factors. The particularized need of each individual checkpoint, coupled with the fact that knowledge of the actual staffing details could assist anyone attempting to breach security, necessitates placing the detailed standards for each checkpoint in the security programs.

Section 108.9 is not duplicative of § 108.5 because it adds a specific new standard that requires supervisory staff at checkpoints. For the first time, part 108 explicitly requires supervision of checkpoints so that screeners have regular and consistent supervision. Criteria for the number of supervisors and screening personnel and the pattern of supervision will continue to be contained in each security program under § 108.5, which will allow latitude geared to the level of activity at the checkpoint. Supervision at low activity airports is required, but the number of supervisors and degree of supervision required in the security program will be appropriate to the size of the airport and the degree of security threat.

#### *Section 108.17—Use of X-ray Systems*

The proposal adds a new subparagraph (h) which would require that air carriers comply with X-ray operator duty-time limitations as specified in the carriers' security programs. X-ray operators would be guaranteed scheduled job rotation frequencies for the purpose of sustaining vigilance.

Four commenters addressed this proposal. The AFA supported the proposal. ALPA said that the proposal would duplicate what is already required in § 108.5 in FAA-approved security programs.

IUFA commented that the duty limits for operators of X-ray systems are undisclosed; therefore, the public is unable to comment on duty limits.

ATA stated that X-ray operator duty limitations will be dealt with in the Air Carrier Standard Security Program, but any limitations should also ensure that job rotations are not so frequent as to disrupt screener performance.

*FAA Response:* The final rule is adopted as proposed. As with other portions of this proposal, the rule language makes the general standard mandatory. The specific standards for frequency of rotation and duty limits will be established in the air carriers' security programs. Specific limits are not specified in the rule out of the need for flexibility to develop and amend standards to fit the requirements of particular checkpoints and because this information is security-sensitive.

The FAA agrees that rotation frequency should be based on attention span and should be neither too long nor too short for maximum alertness. Attention span varies according to workload conditions. Therefore, rotation frequency and duty times will generally vary according to work conditions.

(ATA and ALPA) were in support. ALPA commented that this proposed section would ensure greater visibility of GSC's. AFA supported the proposal as necessary for the effective gathering and dissemination of security related information, as well as evaluating the effectiveness of the station's security functions. ATA commented that existing procedures already provide adequate security oversight, i.e., passenger screening points currently undergo frequent tests of their effectiveness, and that carrier station personnel are aware of the heightened need for vigilance in recent years. In addition, the evaluation and review requirements imposed on the GSC, coupled with personnel evaluation requirements under § 108.31, would be burdensome. The ATA was concerned that the proposed standards for security oversight are not based on a demonstrated need.

Another commenter, an air carrier, was unsure of the level of detail of the proposed evaluation and whether this function could be rotated among carriers. The air carrier also said that the GSC currently conducts annual evaluations of security. The commenter asked whether the proposed requirement for semiannual evaluations would be in addition to the annual evaluation.

*FAA Response:* As stated in the preamble of the NPRM, the section would require several actions by air carriers. The proposal was based on the FAA's determination that existing procedures do not provide adequate oversight. Additional oversight is needed to ensure an improved security system. As an example, FAA security inspections have revealed that, when several carriers share a screening contractor at the same airport, some carriers have assumed that another carrier has passed on the security information to employees of the contractor. This assumption occasionally has proven to be incorrect, and none of the carriers have passed on such information. Proposed § 108.29(a)(1) and (b) have been adopted in this final rule and address this problem.

Notwithstanding the benefits associated with the proposed standards for security oversight, the FAA recognized the potential for a duplication of effort in requiring both daily reviews and semiannual evaluations. As the ATA pointed out, current procedures include scheduled air carrier station inspections conducted by FAA special agents and periodic tests of checkpoint weapons-detection effectiveness. In addition, the final rule establishes oversight and accountability at the air carrier station level by requiring GSC's to conduct daily reviews of all security related functions (§ 108.29(a)(2)). No specific documentation requirements accompany § 108.29(a)(2). Following careful evaluation of comments regarding the added burden the proposed rule would have placed on carriers without significant benefit, the FAA has deleted the proposed requirement to conduct semiannual evaluations. Significantly, however, the final rule also has been modified (§ 108.29(a)(2)(ii)) to explicitly require the air carrier to detect and immediately correct instances of noncompliance identified during the daily reviews. The identification and correction of weaknesses is the essence of improved security. This action is intended to ensure that air carriers maintain an increased awareness, first hand, of the effectiveness of their security activities.

While the FAA remains firmly convinced that the application of unique layers of security countermeasures (redundancy) is justified, it does not intend to promote additional layers of administrative oversight without corresponding benefits. This focus on daily oversight, while deleting the proposed requirement for semiannual evaluations, reduces the administrative burden while retaining significant improvements to operational effectiveness. This approach also is consistent with both ALPA's and AFA's general support of standards for security oversight in that it would ensure greater visibility of GSC's and would enhance the gathering and disseminating of security related information as well as evaluating effectiveness.

#### *Section 108.31—Employment Standards*

This proposed section establishes employment and training standards for screening personnel, including requirements for educational or experience levels; aptitude and physical abilities; the ability to read, speak, and write English; and completion of security program training. Further, the proposal provides for on-the-job training, remedial training, and evaluations. The proposal also provides for certain exceptions to the employment standards for screening functions conducted outside the United States. None of the 11 commenters in this area fully supported this proposed section. Most of the commenters, including

ommended that this function be assigned to the provider of screening services, "which would have the experience to make evaluations that affect not only the quality of screening but also the continued employment of individual screeners."

RAA commented that the FAA's lack of specific standards might cause air carrier concern about possible violations of Federal and state laws relating to discrimination. It stated that "Carriers should not be forced to defend the objectivity and relevance of any tests/examinations they may require in order to comply with necessary, but vague, hiring standards."

One commenter, a medical laboratory, noted that the proposed section does not mention standards for urine drug testing of applicants and employees, and that such standards should be a part of the proposed rule.

Another commenter said that employment standards for screening personnel could adversely affect the labor force eligible for employment. The proposed section also could result in higher wages which would affect airline costs and airport wage rates.

*FAA Response:* In response to the many comments regarding non-disclosure of the specifics of screening personnel employment standards in the NPRM, the FAA carefully reviewed the current standards contained in the security program. The security program has for over a decade had training standards for screening personnel. Prior to this rulemaking, the FAA had amended air carriers approved security programs to strengthen the training and employment standards for security screeners. The provisions in the Aviation Security Improvement Act mandating the establishment of standards did not expand the FAA's authority to issue such standards, since that authority can be found in the preexisting FA Act. The FAA's review of the security program resulted in a determination that certain elements of the existing security program requirements could be included in the public rule without jeopardizing the security of civil aviation. Thus, the following preambular discussion and final rule language, itself, provides more details regarding the standards for screener personnel. Section 108.31(a)(2) has been expanded to include more information about aptitude and physical ability requirements. These are performance-based standards designed to measure an individual's functional ability to successfully complete job tasks related to security duties.

Section 108.31(a)(2)(i) requires that persons used as X-ray operators (i.e., interpreters of X-ray images) must be able to see and distinguish the imaging standard used to determine the performance of the X-ray system itself. For those X-ray images which contain colors (through computer enhancement), the operator must be able to distinguish those colors and to explain their significance. A person with some color perception defect may well be able to perceive the three or four strong colors used in current equipment. The FAA expects that a screener will only be able "... to explain what each color signifies. . ." after undergoing initial training. This is in keeping with § 108.31(b), which provides that a screener undergoing on-the-job training may not make independent screening judgments. For those security checkpoints which do not employ color-enhanced X-ray equipment, color perception is not required for the X-ray position except as provided in § 108.31(a)(2)(ii).

The latter requirement requires all screeners to perceive each color used for a visual alarm or off/on switch by each unit of screening equipment at each checkpoint at which they serve. This equipment consists of X-ray baggage inspection systems and walk-through metal detection devices ("metal detectors"). Both usually have color-illuminated off/on switch indicators, and the walk-through metal detectors customarily are equipped with color alarm indicators as well as audible alarms. X-ray systems customarily include red warning lights to indicate that an X-ray beam has been energized. It is essential that screeners be able to ascertain, for example, that a metal detector has not become unplugged and that a metal detector is indicating an excess amount of metal on an individual's person. Visual alarm indicators on metal detectors become very important at a crowded, noisy checkpoint, especially where several parallel metal detectors may be emitting a number of similar audible alarms.

In § 108.31(a)(2)(iii), screeners must be able to hear and respond to the spoken voice and to audible alarms generated by screening equipment in an active checkpoint environment. Screeners must be able

of the position

The English language requirement proposed in § 108.31(a)(3) is a new requirement. The NPRM specifically invited comments on the language issue, but none were received. While no one commented on this issue, the final rule includes additional language to clarify the intent of the requirement. The additional detail will be useful to persons interested in seeking employment as screeners. As with basic aptitudes and physical abilities, English language qualifications are measured against the requirements of screener duties, rather than standardized academic tests.

Section 108.31(a)(3)(i) requires that screeners must be able to understand and carry out written and oral instructions in English regarding the proper performance of their screening functions. Because security training and supervision in the United States is presented in English, it is essential that screeners understand written and oral instruction in all phases of their jobs.

Section 108.31(a)(3)(ii) requires that screeners be able to read English-language identification media; credentials; airline tickets; and labels on bottles, aerosol cans, packages, and other items normally encountered in the screening process.

Section 108.31(a)(3)(iii) requires that screeners speak and understand English well enough to understand and answer questions and to give comprehensible directions to persons undergoing screening. These skills are very basic in a position with such considerable public contact, yet the FAA has often received complaints from the public concerning the lack of such skills.

Finally, § 108.31(a)(3)(iv) requires that screening personnel, when charged with recordkeeping duties, be able to write incident reports, statements, and log entries in the English language. This is intended to ensure that no person incapable of writing in English is assigned recordkeeping duties. In response to comments on § 108.31(d), the FAA has reevaluated the benefits that would have accrued from the proposed requirement that GSC's conduct semiannual evaluations of screeners. The FAA has concluded that an annual evaluation, coupled with the requirement of immediate remedial training for screeners who fail an operational test, are sufficient safeguards to ensure the desired level of security effectiveness. Thus, in the final rule, the requirement for semiannual screener evaluations has been changed to an annual evaluation. Further, the FAA doesn't agree with ATA's comment that GSC's lack the qualifications to conduct the evaluation of screeners. GSC's are an integral part of the security system and are tasked in the final rule to conduct daily reviews of all security related functions.

With respect to the comment on the need to drug test security screeners, drug testing is already required by FAA regulations.

Contrary to the suggestion that this rulemaking might adversely impact the labor force, the FAA does not anticipate that these employment standards will have a significant impact on the availability of persons to fill screener positions. While the final rule has established appropriate security-related standards, these standards do not prevent the majority of U.S residents from qualifying. If the establishment of appropriate security standards has the effect of requiring higher salaries to attract qualified applicants, the resulting professionalism is both beneficial and consistent with the purposes of the Aviation Security Act.

Proposed § 108.31(f), which addressed locations outside the United States where the certificate holder has operational control over a screening function, has been modified slightly in the final rule. No comments on this section were received. The NPRM language that “. . . at least one person with the ability to functionally read and speak English is present . . .” has been changed to “. . . at least one representative of the certificate holder . . . is present . . .”. This change is to clarify that the English speaking person must be a representative of the certificate holder. A “representative of the certificate holder” could include the certificate holder's direct employee, an employee of another carrier (foreign or U.S. flag), or a screener or other contract employee as long as such a person is acting on behalf of the certificate holder.



Freedom of Information Act does not exempt the development of minimum security employment standards from the requirements of the APA. Commenters felt that such standards as training curricula and hours do not pose a security threat and that by omitting these specifics from the NPRM, the FAA denied the public an opportunity to comment fully on matters affecting public safety. Families of Pan-Am 103/Lockerbie recommended, at an absolute minimum, that the following areas be included in the rule: minimum physical standards, criminal history standards, mental and educational standards, hours of training, and screening standards.

Some commenters recommended that the FAA either withdraw the NPRM and issue another proposed rule, or issue a supplemental NPRM, either of which should set forth sufficient minimum standards to allow for full public comment on employment and training standards. These commenters, as well as airport operators, provided similar comments about the lack of specifics in various sections of the proposed rule; these comments are discussed within each applicable section.

*FAA Response:* The FAA disagrees with the commenters who expressed the opinion that APA notice and comment requirements were not complied with because some details of specific security program standards were not disclosed in the proposed rule. Very few requirements were withheld from public disclosure. Those few areas withheld were of a security-sensitive nature or involve individualized details of specific security programs. With few exceptions, the content, scope, and associated costs for every aspect of this rulemaking were disclosed in the NPRM for notice and comment purposes.

In the part 107 portion of the NPRM, for example, a full definition of the security identification display area and the content of the training curriculum and recordkeeping requirements were fully disclosed for public review and comment. Likewise, the duties of an ASC were set out in the NPRM.

In the part 108 portion of the NPRM, a significant amount of detailed information regarding security screener qualifications was disclosed for public notice and comment. The fundamental aptitudes and physical abilities for screeners were enunciated and discussed in both the preamble and rule language itself. The standards for security oversight were also fully detailed in the proposed rule, including the scope and content of security knowledge required of security personnel, the frequency of security evaluations, and the applicability of these standards to contractor personnel.

Thus, the FAA does not agree with commenters who stated that there was insufficient disclosure of details of the proposed security standards in the NPRM. In all instances, either the details were fully disclosed or withheld for legitimate security reasons.

#### **Miscellaneous**

Two commenters representing the interests of smaller or regional airports, argued that the users of these airports do not face the same level of security risk as those using large or international airports. One of the commenters felt that the additional manpower costs of providing increased training and security at smaller airports will be burdensome and will result in decreased airport maintenance and airline service.

One commenter suggested that aviation security could be strengthened if the focus were on increasing employee retention, thereby resulting in a stable, qualified work force. This commenter suggests that airport authorities should impose fines on employers who have excessive turnover rates.

One commenter recommended wider use of its computerized security equipment in training security screeners and persons with unescorted access to the SIDA. It says that its equipment would be cost effective and is currently used by some U.S. air carriers, foreign governments, and airport authorities to test, document, and evaluate security delivery systems.

Another commenter stated that the proposed rule will add costly training and reporting requirements into a system that is already overtaxed; the commenter suggested that resources would be better spent on developing more sophisticated intelligence gathering methods and equipment.

nature of the transportation system. However these standards are designed to be flexible and geared to the particularities of each airport. Therefore, the costs of complying with these standards are expected to be in proportion to the size and scope of the operations at each airport and should not adversely affect other airport functions.

Regarding the concern about employee retention, the FAA has long held that employee retention, notably in screening operations, is desirable. However, there is no evidence to support the proposition that the imposition of fines on employers with high turnover rates would result in increased employee retention or better qualified employees. Retention rates may improve as a result of this rulemaking since it establishes comprehensive employment and training standards.

The use of computerized security training equipment is an area of development that has potential. However, until further research and evaluations are completed, it would be premature to impose a requirement on airport operators and air carriers to use computerized security training equipment at this time. Of course, airport operators and air carriers may elect to use computerized systems if the FAA determines the systems are effective in meeting security-related responsibilities.

The FAA recognizes that an effective civil aviation security system can be expensive. However, the current security requirements are absolutely essential to counter the current level and sophistication of threats to civil aviation.

Regarding the length of the comment period, the FAA agrees that the time frame was brief. The FAA usually provides a longer comment period; however, in this case, the FAA was constrained by the congressional mandate of the Aviation Security Improvement Act.

Concerning ATA's comment about applicability of the requirements to U.S. operations of foreign air carriers the FAA issued a final rule on July 1, 1991, amending part 129, to require that the security programs of foreign air carriers provide a level of protection similar to U.S. air carriers (56 FR 301122). This action was taken in response to section 105(a)(k)(2) of the Aviation Security Improvement Act. The FAA is evaluating changes that may be necessary to these foreign air carrier security programs to provide a similar level of protection.

Finally, the FAA is fully aware of the position taken by the Families of Pan-Am 103/Lockerbie. The FAA also appreciates the unique perspective that this organization brings to the security arena. The agency seeks to assure the Families of Pan-Am 103/Lockerbie, as well as all other interested parties, that the FAA has moved on several fronts to strengthen the aviation security system. The FAA has worked with the Congress and a number of groups (e.g., President's Commission on Aviation Security and Terrorism and the Aviation Security Advisory Committee) to clearly define areas needing improvement. The FAA has initiated action in response to identified problems. In addition, the FAA can point with pride to the major advances initiated since 1985 in the aviation security field.

The FAA's quick and sure reaction to the crisis which surrounded the Iraqi invasion of Kuwait in August of 1990, and the agency's efforts to safeguard the aviation system during Operations Desert Shield and Desert Storm, proved both effective and only minimally disruptive to the traveling public. Just as surely, the cooperation of the industry and the public was key to that success. This achievement provides a firm footing to make further progress in safeguarding aviation. This rulemaking is a major step in that direction.

The agency will continue to work with the Congress, the International Civil Aviation Organization, the industry public groups, and private individuals to maintain that momentum.

In addition to the changes made in response to the commenters and noted previously, minor editorial changes to the rule have been made for the sake of clarity.

estimate estimates of the economic consequences of the regulatory action. The summary and the full evaluation quantify, when practical, estimated costs to the private sector, consumers, Federal, State and local governments, as well as anticipated benefits.

Executive Order 12291, dated February 17, 1981, directs Federal agencies to promulgate new regulations or modify existing regulations only if potential benefits to society for each regulatory change outweigh potential costs. The order also requires the preparation of a Regulatory Impact Analysis of all "major" rules except those responding to emergency situations or other narrowly defined exigencies. A major rule is one that meets one of the following criteria if it: has an annual effect on the economy of \$100 million or more; causes a major increase in consumer costs; has a significant adverse effect on competition, or is highly controversial.

The FAA has determined that this rule is not "major" as defined in the executive order, therefore a full regulatory analysis, that includes the identification and evaluation of cost reducing alternatives to this rule, has not been prepared. Instead, the agency has prepared a more concise document, termed a regulatory evaluation, that analyzes only this rule without identifying alternatives. In addition to a summary of the regulatory evaluation, this section also contains an initial regulatory flexibility determination as required by the 1980 Regulatory Flexibility Act (P.L. 96-354) and an international trade impact assessment. If more detailed economic information is desired than is contained in this summary, the reader is referred to the full regulatory evaluation contained in the docket.

### **Cost**

Commenters on the cost of the rule focused on the training cost of persons with unescorted access to security identification display areas (SIDAs). The commenters primarily wanted more detail on the curriculum and hours requirement of the training. The specific content of the training will vary from airport to airport. Hence, the contents of this training will be spelled out in each airport security plan. However, the length of training will be only 2 hours or less.

The rule will improve airport security, but it will also impose additional costs on airport operators and on airlines. Tables 1.a and 1.b outline the changes, the type of costs associated with that change, and the estimated costs. All costs are presented in 1990 dollars and are discounted using a 10 percent discount rate.

**Table 1.a**  
**Changes in FAR Part 107 "Airport Security"**

<i>Section</i>	<i>Rule</i>	<i>Annualized Costs</i>
107.7	Will require reporting changes in security liaison personnel.	No incremental costs.
107.25	Will require training in security procedures for persons authorized unescorted access to restricted areas at airports.	Training costs for security personnel include wages paid during training and cost of instruction: \$4,456,000.
107.27	Will clarify the responsibility of airport operators to provide evidence of compliance of this part.	No incremental costs.
107.29	Will require appointment of an Airport Security Coordinator.	Small administrative costs of \$22,400.

The rule will impose discounted costs of approximately \$37.7 million over the period 1992 through 2001; the annualized costs will be approximately \$5.9 million. About \$4.5 million in annualized costs result from enhanced training requirements for personnel authorized for unescorted access to SIDA's. Approximately \$1.2 million in costs come from enhanced checkpoint staffing requirements at small airports. In addition, the amendment will impose \$218,000 in administrative and other costs on airports and air carriers.

### Benefits

The primary benefit from this rule is a reduced risk of terrorist incidents and other criminal acts against civil aviation within the U.S. Although this regulation affects U.S. airports, benefit estimates are based on the potential for terrorist activity throughout the world. Terrorists' activity ranges from an inflight bombing that destroys an aircraft to a hijacking.

**Table 2**  
**Terrorist Bombings Aboard Civil Aircraft 1986/1989**

<i>Date</i>	<i>Airline</i>	<i>Killed</i>	<i>Injured</i>
04/02/86	TWA	4	9
05/03/86	Air Lanka	16	41
10/26/86	Thai Airways	0	62
03/01/88	BOP Air (S. Africa)	17	0
12/21/88	Pan Am	270	0
09/19/89	UTA	171	0
11/27/89	Avianca	107	0
<b>Total</b>		<b>585</b>	<b>112</b>

Table 2 lists acts of aviation sabotage since 1986 where an explosion occurred aboard the airplane. The seven explosions produced an average of 84 fatalities. Between 1980 and 1985, 18 bombing incidents (7 incidents resulted in fatalities or injuries) occurred aboard civil aircraft accounting for 505 fatalities. These data reveal the extent of terrorist activity and the risk of a major terrorist bombing incident.

Although terrorist incidents are unpredictable, the potential economic loss from such an event can be measured based on avoided fatalities, injuries, and aircraft damage. To give the public and Government officials a benchmark comparison of the expected safety benefits of rulemaking actions over an extended period with estimated costs in dollars, the FAA currently uses a value of \$1.5 million to represent statistically an avoided human fatality (according to guidelines issued by the Office of the Secretary of Transportation dated June 22, 1990).

**Table 3**  
**Estimated Benefits from Prevention of Terrorist Act**

<i>Aircraft Type</i>	<i>Boeing 727</i>	<i>DC10</i>
Capacity	148.8	275.4
Load Factor	61.4	68.5

Table 3 presents a range of the potential benefits from avoiding just one terrorist incident during the next 10 years. The destruction of a Boeing 727 could result in a death toll of 91 persons. The estimated benefits of avoiding these deaths are \$137 million. The replacement value of a Boeing 727 in 1990 dollars is approximately \$6 million. The present value of such a disaster is valued at \$92 million with an annualized value of \$14 million over the period 1992 through 2001. On the other end of the scale, the loss of a DC10 could cause the loss of 189 lives and aircraft damage of \$24 million. The discounted value of preventing such an incident is \$198 million with an annualized value is \$30.7 million.

Historically, a domestic hijacking that detours an airplane from its scheduled route but results in no aircraft damage or injuries has an estimated annualized benefit that ranges from \$27,000 to \$54,000.

**Table 4**  
**Benefit Cost Comparison**

<i>Category</i>	<i>Annualized Value</i>	<i>Ten Year Discounted Value</i>
<i>Cost</i>	<i>\$5,852,000</i>	<i>\$37,655,000</i>
<i>Low Benefit</i>	<i>\$14,303,000</i>	<i>\$92,181,000</i>
<i>Low Net Benefits</i>	<i>\$8,451,000</i>	<i>\$54,526,000</i>
<i>High Benefit</i>	<i>\$30,668,000</i>	<i>\$197,600,000</i>
<i>High Net Benefits</i>	<i>\$24,816,000</i>	<i>\$159,945,000</i>

#### **Benefit-Cost Comparison**

A comparison of potential benefits and costs of the rule is presented in Table 4. On the low side, the potential discounted net benefit from the amendment could be \$55 million (\$8.5 million annualized net benefit); on the high side, discounted net benefit could be \$160 million (\$24.8 million annualized net benefit). The benefit that may be derived from the added deterrence of a potential hijacking is not specifically included in these estimates. Prevention of hijacking simply strengthens the argument about rule benefits.

The FAA, therefore, has determined that it is reasonable to expect the potential benefits of the rule to exceed its costs.

#### **International Trade Impact**

The rule will have little or no impact on international trade. This amendment is not likely to affect foreign operators except where their personnel have access to unescorted areas of the airport. In this instance, the operator must provide training as stated in the amendment. This cost will be the same for international carriers and domestic carriers.

#### **Initial Regulatory Flexibility Analysis**

The Regulatory Flexibility Act §§ 603(b) and 603(c) of 1980 (RFA) ensures that government regulations do not needlessly and disproportionately burden small businesses. The RFA requires FAA to review each rule that may have "a significant economic impact on a substantial number of small entities." FAA criteria sets a "substantial number" as not less than 11 and more than one-third of the small entities subject to the rule. About 220 small airports will be affected by this rule. The affected small airports are those operated by towns, cities, or counties whose populations are each less than 50,000 according to the FAA Regulatory Flexibility Criteria and Guidance. This Criteria defines a threshold value for "a significant economic impact" as \$6,950 in 1990 dollars.

Of the 220 airports which qualify as small entities, none incur costs that exceed the threshold. These airports will experience some additional costs resulting from requirements for training personnel

at more than one or two airports and administrative costs will be small. The annual cost of staffing two airport checkpoints with a supervisor for 4 hours a day, 5 days per week will be approximately \$24,000. (Costs to airlines will come from §§ 107.25, 107.29, and 108.31). Therefore, the additional cost will not exceed one-half the threshold for part 135 operators or one-fourth the threshold for part 121 operators. Hence, the rule will not have a significant economic impact on a substantial number of part 121 and part 135 small entities.

Hence, the FAA certifies that the regulatory action will not have a significant economic impact on a substantial number of small entities.

### **Conclusion**

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this regulation is not major under Executive Order 12291. In addition, the FAA certifies that this regulation will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This regulation is considered significant under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979) because of substantial public and congressional interest in the enhancement of aviation security. A regulatory evaluation of the regulation, including a Regulatory Flexibility Determination and International Trade Impact Analysis, has been placed in the docket. A copy may be obtained by contacting the person identified under "FOR FURTHER INFORMATION CONTACT."

### **The Amendment**

In consideration of the foregoing, the Federal Aviation Administration amends parts 107 and 108 of the Federal Aviation Regulations (14 CFR parts 107 and 108) effective September 19, 1991.

The authority citation for part 108 is revised to read as follows:

*Authority:* 49 U.S.C. App. 1354, 1356, 1357, 1421, 1424, and 1511; 49 U.S.C. 106(g); Sec. 101, *et seq.*, Pub. L. 101-604, 104 Stat. 3066.

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### **Amendment 108-11**

#### **Use of X-Ray Systems**

**Adopted: September 16, 1991**

**Effective: October 24, 1991**

**(Published in 56 FR 48370, September 24, 1991)**

**SUMMARY:** The FAA is amending the airplane operator security regulations by removing the exception to meeting the current X-ray imaging standard for X-ray screening systems in use prior to July 22, 1985. Each United States air carrier conducting screening under a mandatory security program will be required to use only X-ray systems that meet the current X-ray imaging standard required under its approved security program to screen carry-on and checked articles. Likewise, each foreign air carrier that lands or takes off in the United States will be required to use only X-ray screening systems that meet the current X-ray imaging standard under its accepted security program to screen carry-on and checked articles in the United States. This action is needed due to the increased sophistication of terrorist acts. The intended effect is to increase the safety of passengers and crewmembers aboard aircraft by providing an upgraded aid at airport screening points to prevent the carriage of explosives, incendiaries, or deadly or dangerous weapons.

security has become an even greater concern of the aviation community. In recent years, sophisticated explosive devices have been used to damage or destroy civilian airliners resulting in the loss of many lives. The bombing of Pan American World Airways (Pan Am) Flight 103 demonstrates the continuing need to protect the safety and security of passengers and crewmembers aboard air carriers. Eliminating any exceptions to meeting the most current X-ray imaging standard is one way to address this need, and is consistent with recommendations made by the President's Commission on Aviation Security and Terrorism. The commission's report, issued on May 15, 1990, repeatedly recommended "use of the most modern X-ray equipment." (See, for example, pages 58, 61, and 122 of the report.)

### **History**

The FAA's present Civil Aviation Security Program, initiated in 1973, requires certain U.S. air carriers to conduct security screening to prevent or deter the carriage aboard aircraft of any explosive, incendiary, or deadly or dangerous weapon on or about any individual's person or accessible property. Part 108 of the Federal Aviation Regulations (FAR) (14 CFR part 108), which pertains to U.S. air carrier security, was promulgated in 1981 (46 FR 3782; January 15, 1981). The pertinent provisions in part 129, which govern the operations of foreign air carriers that hold a permit issued by the Civil Aeronautics Board or the Department of Transportation under section 402 of the Federal Aviation Act or that hold another appropriate economic or exemption authority issued by those entities, were promulgated in 1976 (41 FR 30106; July 22, 1976).

On November 29, 1976, the FAA promulgated new 14 CFR part 191 (41 FR 53777; December 9, 1976) establishing the requirements for withholding security information from disclosure under the Air Transportation Security Act of 1974. Air carrier security programs are documents detailing how U.S. and foreign air carriers will comply with the security requirements contained in the FAR. They contain sensitive security requirements, including specific performance criteria and operational information for X-ray systems, and are not available to the public.

On May 28, 1985, the FAA issued Amendments Nos. 108-1 and 129-13 (50 FR 25654; June 20, 1985), which established a new standard for testing the effectiveness of X-ray systems (14 CFR 108.17 and 129.26). This new standard was effective on July 22, 1985; however, it did not apply to X-ray systems in use prior to that date. In a parallel action, the FAA amended each air carrier's approved security program to include a "grandfather" provision for X-ray systems in use prior to July 22, 1985.

### **Related Activities**

For many years, the passenger screening system has been effective in countering the threat to domestic and international civil aviation, which primarily came from hijackers. In recent years, this threat has expanded to include aircraft bombings. The bombing of Pan Am Flight 103 is a reminder that civil aviation is still vulnerable to criminal and terrorist acts. A comprehensive review of security procedures has been conducted to determine where existing procedures may be improved and where new procedures may be warranted. On April 3, 1989, Secretary of Transportation Samuel K. Skinner announced a number of aviation security initiatives to enhance protection of travelers at airports in the United States and other countries. Significant among these initiatives was the commitment to propose the removal of grandfather provisions for older X-ray systems. To accomplish this, a Notice of Proposed Rulemaking (NPRM) was published in the *Federal Register* (55 FR 25806) on June 22, 1990. This final rule makes the changes proposed in the NPRM.

Other recent FAA security initiatives include requiring the use of explosives detection systems (EDS) and the establishment of a mandatory security directives system, both the subject of separate rulemakings that resulted in the issuance of final rules. The final rule requiring EDS was issued on August 30, 1989 (54 FR 36938; September 5, 1989). See 14 CFR 108.20. The final rule establishing the Security Directives and Information Circulars system was issued on July 6, 1989 (54 FR 28982; July 10, 1989). See 14 CFR 108.18.

standard set by the Administrator, except that an X-ray system in use prior to July 22, 1985, may meet the requirements in effect on July 21, 1985. See 14 CFR 108.17(a)(5) and 129.26(a)(5).

### **Future Actions**

The U.S. Government has actively supported research and development efforts in X-ray systems and the FAA has been evaluating X-ray systems on a continuing basis. The FAA recognizes that there have been significant technological advancements made in X-ray systems. Consequently, the FAA is considering a separate action proposing to amend approved air carrier security programs and accepted foreign air carrier security programs to establish a more stringent imaging standard than the current standard established in 1985.

The NPRM for this action anticipated a final determination regarding a new imaging standard prior to publication of this rule. However, the FAA is still gathering data to evaluate the technical aspects and impact of a new standard. The FAA is proceeding with this rule to address the need to protect the safety and security of passengers and crewmembers, and to implement the recommendations of the President's Commission on Aviation Security and Terrorism. Given the benefits expected to result from this rule, and the minimal costs involved, the FAA has determined that it is cost-beneficial to proceed with this rule to bring all X-ray systems up to current standards. Air carriers and foreign air carriers will be given the opportunity to comment on any proposed amendment to their security programs that would establish a new imaging standard.

As previously stated, security programs are exempt from disclosure under 14 CFR part 191. In accordance with 14 CFR 191.5, the FAA will not provide the current or any future performance criteria or detailed operational information in any document generally available to the public. The FAA has determined that disclosure of this information would be detrimental to the safety of persons traveling in air transportation or intrastate air transportation.

### **General Discussion**

The FAA is amending part 108 to ensure that all certificate holders use only X-ray systems that meet the current imaging requirements of their approved security programs to screen carry-on and checked articles. The FAA is also amending part 129 to require foreign air carriers who land or take off in the United States and who conduct screening under an accepted security program to use only X-ray systems that meet the current imaging requirements in their accepted security programs to screen carry-on and checked articles in the United States.

#### *Section 108.17*

Paragraph (a)(5) of this section is revised to eliminate a grandfather clause allowing for the exception of certain X-ray systems from the requirement to meet the imaging requirements set forth in an approved air carrier security program using the step wedge specified in American Society for Testing and Materials Standard F792-82.

#### *Section 129.26*

Paragraph (a)(5) of this section is revised to eliminate a grandfather clause allowing for the exception of certain X-ray systems from the requirement to meet the imaging requirements set forth in an accepted air carrier security program using the step wedge specified in American Society for Testing and Materials Standard F792-82.

### **Discussion of Comments**

The FAA received comments from three air carriers, one foreign air carrier, five crewmember organizations, and the National Transportation Safety Board. Eight commenters supported the proposed rule and two opposed it.



The actual schedule for replacement of X-ray systems that do not meet the current imaging standard will be contained in amendments to each air carrier's approved security program. The FAA has notified air carriers of a proposed amendment that would require them to implement this rule. The FAA believes a six-month implementation period will provide sufficient time to order, deliver, and install replacement X-ray units at any airport in the United States. To permit a longer implementation period would significantly detract from the FAA's goal of achieving a uniform imaging standard as soon as possible. The amendment to the carriers' approved security programs will provide an implementation period that ends six months after the effective date of this final rule.

The regulatory evaluation included in this rule has identified the net cost of this rule as only \$1,380 per replacement X-ray system. Therefore, the FAA does not believe that this rule will impose undue economic hardship on carriers operating out of smaller airports. Further, this rule does not require the use of an X-ray system to inspect carry-on and checked articles. Air carriers may physically inspect all such articles to comply with their approved security programs.

The application of the rule to X-ray systems used by foreign air carriers for flights to the United States was opposed by one commenter. The comment expressed the view that if a State wishes to implement enhancements to security measures for flights to that State from another State the appropriate procedure is to request the foreign State to establish the desired standard. Sections 108.17(a) and 129.26(a) both apply only to "an X-ray system within the United States". This rule does not change that application to include X-ray systems at foreign airports.

One commenter opposed the proposed rule as unnecessary and unjustified at smaller airports, arguing that X-ray systems that do not meet the current imaging standard should continue to be used with more physical searches to clear items that cannot be identified by the X-ray operator. The commenter said it might be appropriate to require a higher imaging standard at larger airports.

The FAA does not agree that a clearly outdated imaging standard is acceptable even at smaller airports. If physical searches are not used exclusively, the decision to conduct a physical search is made by the X-ray system operator viewing the X-ray image. The ability of the operator to recognize a potential explosive, incendiary, or deadly or dangerous weapon is dependent upon the imaging capability of the X-ray system. The intent of this rule is to increase the safety of passengers and crewmembers by providing a better image to the operator and increasing the probability that weapons, explosives, and incendiaries will be detected.

#### **Paperwork Reduction Act**

In accordance with the Paperwork Reduction Act of 1980 (Pub. L. 96-511), there are no collection of information requirements associated with this rule.

#### **Regulatory Evaluation Summary**

##### *Introduction*

This section summarizes a full regulatory evaluation prepared by the FAA that provides detailed estimates of the economic consequences of this regulatory action. The full evaluation quantifies, to the extent practicable, estimated costs to the private sector, consumers, Federal, State and local governments, as well as anticipated benefits and impacts.

Executive Order 12291 dated February 17, 1981, directs Federal agencies to promulgate new regulations or modify existing regulations only if potential benefits to society for each regulatory change outweigh potential costs. The order also requires the preparation of a Regulatory Impact Analysis of all "major" rules except those responding to emergency situations or other narrowly defined exigencies. A "major" rule is one that is likely to result in an annual effect on the economy of \$100 million or more, a major increase in consumer costs, or a significant adverse effect on competition. The FAA has determined

in service in the United States that are incapable of meeting current imaging requirements using the step wedge as specified in American Society for Testing and Materials Standard F792-82. These requirements have been in effect since July 1985. (In the NPRM published in 1990, the FAA estimated there were approximately 170 U.S. carrier and 2 foreign carrier X-ray systems in use in 1989 that did not meet this standard. Because some time has elapsed since this survey was completed, the FAA estimates that 56 of the U.S. systems have been retired since then.) Such systems will no longer be acceptable for airport security purposes under this amended regulation and the parallel amendment of the carriers' approved security programs. Thus, air carriers must phase in acquisition of new systems within six months after the regulation's effective date, as will be provided in the security program amendment.

Even in the absence of this rule, the 116 systems will have to be replaced once they reach the end of their useful lives. According to one manufacturer of X-ray systems, these units have a life expectancy of approximately eight to ten years. Because carriers have been prohibited since July 1985 from purchasing additional X-ray systems that do not meet the current imaging standard, all existing systems that fail to meet the standard must be at least 5 years old now. Therefore, by assuming a 9-year average life for X-ray systems, the cost of this rule is the difference between purchasing 116 new standard X-ray systems immediately (net of salvage value for replaced systems) versus purchasing new systems over a 4-year period as the existing systems wear out.

For the purposes of this analysis, replacement system costs reflect the price of a standard black and white X-ray system used for hand-carried articles because this system is a basic model that meets the current standard. Industry sources state such systems retail for about \$32,000 each, including installation. Prices will vary, however, based on location and number of systems ordered. At \$32,000 each, 116 new systems would cost about \$3.71 million. The replaced system, which has somewhere between zero and 4 years of useful life remaining, will have some resale value for non aviation purposes such as industrial security. The FAA estimates the current average resale value per system at \$4,000, or about \$0.46 million for the estimated 116 systems still in use. Therefore, the total immediate outlay for new X-ray systems will be \$3.71 million less \$0.46 million = \$3.25 million.

The net cost of this rule will be \$3.25 million less the discounted cost of replacing systems when they wear out. Thus, the net cost of the rule is the difference between the current replacement cost of the systems and the discounted cost of the systems if purchased at a later date. No information is readily available concerning the exact age of each existing system that will need to be replaced, or the current replacement rate of such systems. It has been assumed for this analysis that one-fourth (29) of these systems will be replaced in each of the next 4 years. The discounted cost (a 10 percent discount rate is used) of replacing these 116 systems over a 4-year period is \$3.09 million. Therefore, the net cost of this rule is \$3.25 million less \$3.09 million = \$0.16 million, or about \$1,380 per replacement X-ray system.

These costs (\$0.16 million) were calculated as of year end 1990. The costs of this rule will decrease over time, as more X-ray systems that do not meet the current imaging standard reach the end of their useful lives and are replaced with new systems. Taking into account the time that has elapsed since these costs were calculated, plus a six-month implementation period following the rule's effective date, the actual costs of this rule will be substantially lower than stated here by the time carriers actually implement the changes mandated by the rule.

Another cost factor concerns anticipated differences in maintenance costs between the replaced systems and the replacement systems. The FAA expects their maintenance costs to be very similar, and will, therefore, not alter the above cost calculations. However, one industry representative indicated that many of the systems that will be replaced are equipped with image intensifiers that are relatively expensive, and might need replacing once a year. In comparison, technological improvements in the replacement systems have eliminated the need for image intensifiers. Therefore, it is possible that the overall costs of this rule are somewhat overstated.

were perpetrated against U.S. air carriers between 1979 and 1988. Because the FAA expects the threat of sabotage to increase in the future, and because the X-ray systems in question have been identified as a weak link in the overall U.S. civil aviation security system, the FAA expects that substantial benefits will result from the rule.

One way to assess the benefits of this rule is to put expected costs into perspective. The total estimated cost of this rule, discounted over 4 years (the estimated remaining life of the systems to be replaced), is \$160,000. Therefore, if one life is saved sometime in the 4-year period after the rule is in effect, the cost of saving that life would be approximately \$160,000. Similarly, if one aircraft with 200 passengers is saved from destruction as a result of this rule, the cost per life saved would be only \$800.

In order to provide the public and government officials with a benchmark comparison of the expected safety benefits of rulemaking actions over an extended period of time with estimated costs in dollars, the FAA currently uses a value of \$1.5 million to represent statistically a human fatality avoided (in accordance with guidelines issued by the Office of the Secretary of Transportation dated June 22, 1990). Using a statistical value of a human life of \$1.5 million, or about \$1.25 million when discounted over 4 years, the benefits associated with saving a single life during the next 4 years would be about 7.8 times the estimated \$160,000 cost to accomplish it. Given the large difference between potential benefits and known costs, the FAA believes this rule to be cost-beneficial.

#### **International Trade Impact**

The rule will have little or no impact on trade for U.S. firms doing business overseas or for foreign firms doing business in the United States. The rule affects all carriers of U.S. registry and foreign air carriers operating scheduled passenger service or public charter passenger operations in the United States that are required to screen passengers under a security program. The expected additional annual costs should not create an economic disadvantage to either domestic operators or foreign carriers operating in the United States.

#### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily burdened by government regulations. The RFA requires agencies to review rules to determine whether they may have a "significant economic impact on a substantial number of small entities." The FAA's criterion for a "substantial number" is a number that is not less than 11 and that is more than one third of the small entities subject to the rule. For air carrier operators, a small entity has been defined as one who owns, but does not necessarily operate, nine aircraft or less. The FAA's criteria for "a significant impact" are at least \$4,200 per year for an unscheduled carrier, \$60,300 per year for a scheduled carrier having an airplane or airplanes with only 60 or fewer seats, and \$107,900 per year for a scheduled carrier having an airplane or airplanes with 61 or more seats.

The FAA believes that it is very unlikely that the rule will have a significant economic impact on a substantial number of small entities. This amendment has relatively low costs because the estimated cost per replacement X-ray system is only \$1,380. At least 11 of the small unscheduled carriers would have to own three or more of the of the X-ray systems in need of replacement for this rule to have a significant economic impact on a substantial number of small entities. The FAA believes that less than 33 of these X-ray systems are currently owned and operated by small entities. Therefore, the FAA finds that this final rule will not have a significant impact on a substantial number of small entities.

#### **Federalism Implications**

The regulations herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Thus, in accordance with Executive Order 12612, it is determined that

and Procedures (44 FR 11034, February 26, 1979). A regulatory evaluation of this rule, including a Regulatory Flexibility Determination and International Trade Impact Analysis, has been placed in the docket. A copy may be obtained by contacting the person identified under "FOR FURTHER INFORMATION CONTACT."

#### **The Amendments**

In consideration of the foregoing, the Federal Aviation Administration is amending parts 108 and 129 of the Federal Aviation Regulations (14 CFR parts 108 and 129) effective October 24, 1991.

The authority citation is revised to read as follows:

*Authority:* 49 U.S.C. App. 1354, 1356, 1357, 1421, 1424, and 1511; 49 U.S.C. 106(g); Sec. 101 *et seq.*, Pub. L. 101-604, 104 Stat. 3066.

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(a) This part prescribes aviation security rules governing—

(1) The operations of holders of FAA air carrier operating certificates or operating certificates engaging in scheduled passenger operations or public charter passenger operations;

(2) Each person aboard an airplane operated by a certificate holder described in paragraph (a)(1) of this section; and

(3) Each person in an airport at which the operations described in paragraph (a)(1) of this section are conducted.

(4) Each certificate holder who receives a Security Directive or Information Circular and each person who receives information from a Security Directive or an Information Circular issued by the Director of Civil Aviation Security.

(b) This part does not apply to helicopter or to all-cargo operations.

Docket No. 24883 (51 FR 1352) Eff. 1/10/86, (Amdt. 108-4, Eff. 1/10/86); (Amdt. 108-6, Eff. 7/10/89)

### **§ 108.3 Definitions.**

The following are definitions of terms used in this part:

(a) "Certificate holder" means a person holding an FAA operating certificate when that person engages in scheduled passenger or public charter passenger operations or both.

(b) "Passenger seating configuration" means the total number of seats for which the aircraft is type certificated that can be made available for passenger use aboard a flight and includes that seat in certain airplanes which may be used by a representative of the Administrator to conduct flight checks but is available for revenue purposes on other occasions.

(c) "Private charter" means any charter for which the charterer engages the total capacity of an airplane for the carriage of:

(2) Passengers invited by the charterer, the cost of which is borne entirely by the charterer and not directly or indirectly by the individual passengers.

(d) "Public charter" means any charter that is not a "private charter."

(e) "Scheduled passenger operations" means holding out to the public of air transportation service for passengers from identified air terminals at a set time announced by timetable or schedule published in a newspaper, magazine, or other advertising medium.

(f) "Sterile area" means an area to which access is controlled by the inspection of persons and property in accordance with an approved security program or a security program used in accordance with § 129.25.

### **§ 108.5 Security program: adoption and implementation.**

(a) Each certificate holder shall adopt and carry out a security program that meets the requirements of § 108.7 for each of the following scheduled or public charter passenger operations:

(1) Each operation with an airplane having a passenger seating configuration of more than 60 seats.

(2) Each operation that provides deplaned passengers access, that is not otherwise controlled by a certificate holder using an approved security program or a foreign air carrier using a security program required by § 129.25, to a sterile area.

(3) Each operation with an airplane having a passenger seating configuration of more than 30 but less than 61 seats; except that those parts of the program effecting compliance with the requirements listed in § 108.7(b)(1), (2), and (4) need only be implemented when the Director of Civil Aviation Security or a designate of the Director notifies the certificate holder in writing that a security threat exists with respect to the operation.

(1) Provide for the safety of persons and property traveling in air transportation and intrastate air transportation against acts of criminal violence and air piracy;

(2) Be in writing and signed by the certificate holder or any person delegated authority in this matter;

(3) Include the items listed in paragraph (b) of this section, as required by § 108.5; and

(4) Be approved by the Administrator.

(b) Each security program required by § 108.5 must include the following, as required by that section:

(1) The procedures and a description of the facilities and equipment used to perform the screening functions specified in § 108.9.

(2) The procedures and a description of the facilities and equipment used to perform the airplane and facilities control functions specified in § 108.13.

(3) The procedures used to comply with the applicable requirements of § 108.15 regarding law enforcement officers.

(4) The procedures used to comply with the requirements of § 108.17 regarding the use of X-ray systems.

(5) The procedures used to comply with the requirements of § 108.19 regarding bomb and air piracy threats.

(6) The procedures used to comply with the applicable requirements of § 108.10.

(7) The curriculum used to accomplish the training required by § 108.23.

(8) The procedures and a description of the facilities and equipment used to comply with the requirements of § 108.20 regarding explosives detection systems.

(c) Each certificate holder having an approved security program shall—

(1) Maintain at least one complete copy of the approved security program at its principal business office;

(2) Maintain a complete copy or the pertinent portions of its approved security program or

other persons to the Director of Civil Aviation Security of the FAA.

(Amdt. 108-3, Eff. 7/11/85); (Amdt. 108-7, Eff. 10/5/89)

#### **§ 108.9 Screening of passengers and property.**

(a) Each certificate holder required to conduct screening under a security program shall use the procedures included, and the facilities and equipment described, in its approved security program to prevent or deter the carriage aboard airplanes of any explosive, incendiary, or a deadly or dangerous weapon on or about each individual's person or accessible property, and the carriage of any explosive or incendiary in checked baggage.

(b) Each certificate holder required to conduct screening under a security program shall refuse to transport—

(1) Any person who does not consent to a search of his or her person in accordance with the screening system prescribed in paragraph (a) of this section; and

(2) Any property of any person who does not consent to a search or inspection of that property in accordance with the screening system prescribed by paragraph (a) of this section.

(c) Except as provided by its approved security program, each certificate holder required to conduct screening under a security program shall use the procedures included, and the facilities and equipment described, in its approved security program for detecting explosives, incendiaries, and deadly or dangerous weapons to inspect each person entering a sterile area at each preboarding screening checkpoint in the United States for which it is responsible, and to inspect all accessible property under that person's control.

[(d) Each certificate holder shall staff its security screening checkpoints with supervisory and non-supervisory personnel in accordance with the standards specified in its security program.]

(Amdt. 108-4, Eff. 1/10/86); (Amdt. 108-5, Eff. 12/21/87); [(Amdt. 108-10, Eff. 9/19/91)]

ing-flight Security Coordinator for each flight, as required by its approved security program.

(b) *Ground Security Coordinator.* Each ground Security Coordinator shall carry out the ground Security Coordinator duties specified in the certificate holder's approved security program.

(c) *Inflight Security Coordinator.* The pilot in command of each flight shall carry out the inflight Security Coordinator duties specified in the certificate holder's approved security program.

Docket No. 24719 (50 FR 28893) Eff. 7/16/85, (Amdt. 108-3, Eff. 7/11/85)

#### **§ 108.11 Carriage of weapons.**

(a) No certificate holder required to conduct screening under a security program may permit any person to have, nor may any person have, on or about his or her person or property, a deadly or dangerous weapon, either concealed or unconcealed, accessible to him or her while aboard an airplane for which screening is required unless:

(1) The person having the weapon is—

(i) An official or employee of the United States, or a State or political subdivision of a State, or of a municipality who is authorized by his or her agency to have the weapon; or

(ii) Authorized to have the weapon by the certificate holder and the Administrator and has successfully completed a course of training in the use of firearms acceptable to the Administrator.

(2) The person having the weapon needs to have the weapon accessible in connection with the performance of his or her duty from the time he or she would otherwise check it in accordance with paragraph (d) of this section until the time it would be returned after deplaning.

(3) The certificate holder is notified—

(i) Of the flight on which the armed person intends to have the weapon accessible to him or her at least 1 hour, or in an emergency as soon as practicable, before departure; and

(4) The armed person identifies himself or herself to the certificate holder by presenting credentials that include his or her clear, full-face picture, his or her signature, and the signature of the authorizing official of his or her service or the official seal of his or her service. A badge, shield, or similar device may not be used as the sole means of identification.

(5) The certificate holder—

(i) Ensures that the armed person is familiar with its procedures for carrying a deadly or dangerous weapon aboard its airplane before the time the person boards the airplane;

(ii) Ensures that the identity of the armed person is known to each law enforcement officer and each employee of the certificate holder responsible for security during the boarding of the airplane; and

(iii) Notifies the pilot in command, other appropriate crewmembers, and any other person authorized to have a weapon accessible to him or her aboard the airplane of the location of each authorized armed person aboard the airplane.

(b) No person may, while on board an airplane operated by a certificate holder for which screening is not conducted, carry on or about that person a deadly or dangerous weapon, either concealed or unconcealed. This paragraph does not apply to—

(1) Officials or employees of a municipality or a State, or of the United States, who are authorized to carry arms; or

(2) Crewmembers and other persons authorized by the certificate holder to carry arms.

(c) No certificate holder may knowingly permit any person to transport, nor may any person transport or tender for transport, any explosive, incendiary, or a loaded firearm in checked baggage aboard an airplane. For the purpose of this section, a loaded firearm means a firearm which has a live round of ammunition, cartridge, detonator, or powder in the chamber or in a clip, magazine, or cylinder inserted in it.

(d) No certificate holder may knowingly permit any person to transport, nor may any person trans-

(3) When the firearm is other than a shotgun, rifle, or other firearm normally fired from the shoulder position, the baggage in which it is carried is locked, and only the passenger checking the baggage retains the key or combination; and

(4) The baggage containing the firearm is carried in an area, other than the flightcrew compartment, that is inaccessible to passengers.

(e) No certificate holder may serve any alcoholic beverage to a person having a deadly or dangerous weapon accessible to him or her nor may such person drink any alcoholic beverage while aboard an airplane operated by the certificate holder.

(f) Paragraphs (a), (b), and (d) of this section do not apply to the carriage of firearms aboard air carrier flights conducted for the military forces of the Government of the United States when the total cabin load of the airplane is under exclusive use by those military forces if the following conditions are met:

(1) No firearm is loaded and all bolts to such firearms are locked in the open position; and

(2) The certificate holder is notified by the unit commander or officer in charge of the flight before boarding that weapons will be carried aboard the aircraft.

(Amdt. 108-4, Eff. 1/10/86)

#### **§ 108.13 Security of airplanes and facilities.**

Each certificate holder required to conduct screening under a security program shall use the procedures included, and the facilities and equipment described, in its approved security program to perform the following control functions with respect to each airplane operation for which screening is required:

(a) Prohibit unauthorized access to the airplane.

(b) Ensure that baggage carried in the airplane is checked in by a responsible agent and that identification is obtained from persons, other than known shippers, shipping goods or cargo aboard the airplane.

(a) Each certificate holder shall carry Federal Air Marshals, in the number and manner specified by the Administrator, on each scheduled and public charter passenger operation designated by the Administrator.

(b) Each Federal Air Marshal shall be carried on a first priority basis and without charge while on official duty, including repositioning flights.

(c) Each certificate holder shall assign the specific seat requested by a Federal Air Marshal who is on official duty.】

Docket No. 24714 (50 FR 27925) Eff. 7/8/85, [(Amdt. 108-2, Eff. 7/8/85)】

#### **§ 108.15 Law enforcement officers.**

(a) At airports within the United States not governed by part 107 of this chapter, each certificate holder engaging in scheduled passenger or public charter passenger operations shall—

(1) If security screening is required for a public charter operation by § 108.5(a), or for a scheduled passenger operation by § 108.5(b) provide for law enforcement officers meeting the qualifications and standards, and in the number and manner specified, in part 107; and

(2) When using airplanes with a passenger seating configuration of 31 through 60 seats in a public charter operation for which screening is not required, arrange for law enforcement officers meeting the qualifications and standards specified in part 107 to be available to respond to an incident, and provide to its employees, including crewmembers, as appropriate, current information with respect to procedures for obtaining law enforcement assistance at that airport.

(b) At airports governed by part 107 of this chapter, each certificate holder engaging in scheduled or public charter passenger operations, when using airplanes with a passenger seating configuration of 31 through 60 seats for which screening is not required, shall arrange for law enforcement officers meeting the qualifications and standards specified in part 107 to be available to respond to an incident and provide its employees, including crewmembers,



under a security program required by § 106.3 of this part or use such a system contrary to its approved security program. The Administrator authorizes certificate holders to use X-ray systems for inspecting carry-on or checked articles under an approved security program if the certificate holder shows that—

(1) For a system manufactured before April 25, 1974, it meets either the guidelines issued by the Food and Drug Administration (FDA), Department of Health, Education, and Welfare (HEW) and published in the *Federal Register* (38 FR 21442, August 8, 1973); or the performance standards for cabinet X-ray systems designed primarily for the inspection of carry-on baggage issued by the FDA and published in 21 CFR 1020.4 (39 FR 12985, April 10, 1974);

(2) For a system manufactured after April 24, 1974, it meets the standards for cabinet X-ray systems designed primarily for the inspection of carry-on baggage issued by the FDA and published in 21 CFR 1020.40 (39 FR 12985, April 10, 1974);

(3) A program for initial and recurrent training of operators of the system is established, which includes training in radiation safety, the efficient use of X-ray systems, and the identification of weapons and other dangerous articles;

(4) Procedures are established to ensure that each operator of the system is provided with an individual personnel dosimeter (such as a film badge or thermoluminescent dosimeter). Each dosimeter used shall be evaluated at the end of each calendar month, and records of operator duty time and the results of dosimeter evaluations shall be maintained by the certificate holder; and

(5) [The system meets the imaging requirements set forth in an approved Air Carrier Security Program using the step wedge specified in American Society for Testing and Materials Standard F792-82.]

(b) No certificate holder may use an X-ray system within the United States unless within the preceding 12 calendar months a radiation survey has been conducted which shows that the system

stands in 21 CFR 1020.40 or guidelines published by the FDA in the *Federal Register* of August 8, 1973 (38 FR 21442) except that a radiation survey is not required for an X-ray system that is moved to another location if the certificate holder shows that the system is so designed that it can be moved without altering its performance.

(d) No certificate holder may use an X-ray system that is not in full compliance with any defect notice or modification order issued for that system by the FDA, unless that Administration has advised the FAA that the defect or failure to comply does not create a significant risk or injury, including genetic injury, to any person.

(e) No certificate holder may use an X-ray system to inspect carry-on or checked articles unless a sign is posted in a conspicuous place at the screening station and on the X-ray system which notifies passengers that such items are being inspected by an X-ray and advises them to remove all X-ray, scientific, and high-speed film from carry-on and checked articles before inspection. This sign shall also advise passengers that they may request that an inspection be made of their photographic equipment and film packages without exposure to an X-ray system. If the X-ray system exposes any carry-on or checked articles to more than one milliroentgen during the inspection, the certificate holder shall post a sign which advises passengers to remove film of all kinds from their articles before inspection. If requested by passengers, their photographic equipment and film packages shall be inspected without exposure to an X-ray system.

(f) Each certificate holder shall maintain at least one copy of the results of the most recent radiation survey conducted under paragraph (b) or (c) of this section and shall make it available for inspection upon request by the Administrator at each of the following locations:

(1) The certificate holder's principal business office; and

(2) The place where the X-ray system is in operation.

(g) The American Society for Testing and Materials Standard F792-82, "Design and Use of Ioniz-

(h) Each certificate holder shall comply with X-ray operator duty time limitations specified in its security program.

(Amdt. 108-1, Eff. 7/22/85); (Amdt. 108-10, Eff. 9/19/91); [(Amdt. 108-11, Eff. 10/24/91)]

#### **§ 108.18 Security Directives and Information Circulars.**

(a) Each certificate holder required to have an approved security program passenger operations shall comply with each Security Directive issued to the certificate holder by the Director of Civil Aviation Security, or by any person to whom the Director has delegated the authority to issue Security Directives, within the time prescribed in the Security Directive for compliance.

(b) Each certificate holder who receives a Security Directive shall—

(1) Not later than 24 hours after delivery by the FAA or within the time prescribed in the Security Directive, acknowledge receipt of the Security Directive;

(2) Not later than 72 hours after delivery by the FAA or within the time prescribed in the Security Directive, specify the method by which the certificate holder has implemented the measures in the Security Directive; and

(3) Ensure that information regarding the Security Directive and measures implemented in response to the Security Directive are distributed to specified personnel as prescribed in the Security Directive and to other personnel with an operational need to know.

(c) In the event that the certificate holder is unable to implement the measures contained in the Security Directive, the certificate holder shall submit proposed alternative measures, and the basis for submitting the alternative measures, to the Director of Civil Aviation Security for approval. The certificate holder shall submit proposed alternative measures within the time prescribed in the

contained in the Security Directive or the Information Circular to those persons with an operational need to know; and

(2) Refuse to release the Security Directive or Information Circular and information regarding the Security Directive or Information Circular to persons other than those with an operational need to know without the prior written consent of the Director of Civil Aviation Security.

Docket No. 25953 (54 FR 28984) Eff. 7/10/89, (Amdt. 108-6, Eff. 7/10/89)

#### **§ 108.19 [Security threats and procedures.**

[(a) Upon receipt of a specific and credible threat to the security of a flight, the certificate holder shall—

[(1) Immediately notify the ground and in-flight security coordinators of the threat, any evaluation thereof, and any countermeasures to be applied; and

[(2) Ensure that the in-flight security coordinator notifies the flight and cabin crewmembers of the threat, any evaluation thereof, and any countermeasures to be applied.]]

[(b)] Upon receipt of a bomb threat against a specific airplane, each certificate holder shall attempt to determine whether or not any explosive or incendiary is aboard the airplane involved by doing the following:

(1) Conducting a security inspection on the ground before the next flight or, if the airplane is in flight, immediately after its next landing.

(2) If the airplane is being operated on the ground, advising the pilot in command to immediately submit the airplane for a security inspection.

(3) If the airplane is in flight, immediately advising the pilot in command of all pertinent information available so that necessary emergency action can be taken.

[(c)] Immediately upon receiving information that an act or suspected act of air piracy has been committed, the certificate holder shall notify the Administrator. If the airplane is in airspace under other than United States jurisdiction, the certificate

#### **§ 108.20 Use of explosives detection systems.**

When the Administrator shall require by amendment under § 108.25, each certificate holder required to conduct screening under a security program shall use an explosives detection system that has been approved by the Administrator to screen checked baggage on international flights in accordance with the certificate holder's security program. Docket No. 25956 (54 FR 36946) Eff. 9/5/89, (Amdt. 108-7, Eff. 10/5/89)

#### **§ 108.21 Carriage of passengers under the control of armed law enforcement escorts.**

(a) Except as provided in paragraph (e) of this section, no certificate holder required to conduct screening under a security program may carry a passenger in the custody of an armed law enforcement escort aboard an airplane for which screening is required unless—

(1) The armed law enforcement escort is an official or employee of the United States, of a State or political subdivision of a State, or a municipality who is required by appropriate authority to maintain custody and control over an individual aboard an airplane;

(2) The certificate holder is notified by the responsible government entity at least 1 hour, or in case of emergency as soon as possible, before departure—

(i) Of the identity of the passenger to be carried and the flight on which it is proposed to carry the passenger; and

(ii) Whether or not the passenger is considered to be in a maximum risk category;

(3) If the passenger is considered to be in maximum risk category, that the passenger is under the control of at least two armed law enforcement escorts and no other passengers are under the control of those two law enforcement escorts;

(6) The certificate holder is assured, prior to departure, by each law enforcement escort that—

(i) The officer is equipped with adequate restraining devices to be used in the event restraint of any passenger under the control of the escort becomes necessary; and

(ii) Each passenger under the control of the escort has been searched and does not have on or about his or her person or property anything that can be used as a deadly or dangerous weapon;

(7) Each passenger under the control of a law enforcement escort is—

(i) Boarded before any other passengers when boarding at the airport where the flight originates and deplaned at the destination after all other deplaning passengers have deplaned;

(ii) Seated in the rear-most passenger seat when boarding at the airport where the flight originates; and

(iii) Seated in a seat that is neither located in any lounge area nor located next to or directly across from any exit; and

(8) A law enforcement escort having control of a passenger is seated between the passenger and any aisle.

(b) No certificate holder operating an airplane under paragraph (a) of this section may—

(1) Serve food and beverage or provide metal eating utensils to a passenger under the control of a law enforcement escort while aboard the airplane unless authorized to do so by the law enforcement escort.

(2) Serve a law enforcement escort or the passenger under the control of the escort any alcoholic beverages while aboard the airplane.

(c) Each law enforcement escort carried under the provisions of paragraph (a) of this section shall, at all times, accompany the passenger under the control of the escort and keep the passenger under surveillance while aboard the airplane.

(d) No law enforcement escort carried under paragraph (b) of this section or any passenger under the control of the escort may drink alcoholic beverages while aboard the airplane.

gram.

(b) No certificate holder may use any person as a crewmember on any domestic or international flight unless within the preceding 12 calendar months or within the time period specified in an Advanced Qualification Program approved under SFAR 58 that person has satisfactorily completed the security training required by § 121.417(b)(3)(v) or § 135.331(b)(3)(v) of this chapter and as specified in the certificate holder's approved security program. With respect to training conducted under § 121.417 or § 135.331, whenever a crewmember who is required to take recurrent training completes the training in the calendar month before or the calendar month after the calendar month in which that training is required, he is considered to have completed the training in the calendar month in which it was required.

Docket No. 24719 (50 FR 28893) Eff. 7/16/85, (Amdt. 108-3, Eff. 7/11/85); (Amdt. 108-8, Eff. 10/2/90)

#### **§ 108.25 Approval of security programs and amendments.**

(a) Unless otherwise authorized by the Administrator, each certificate holder required to have a security program for a passenger operation shall submit its proposed security program to the Administrator for approval at least 90 days before the date of the intended passenger operations. Within 30 days after receiving the program, the Administrator either approves the program or notifies the certificate holder to modify the program to comply with the applicable requirements of this part. The certificate holder may petition the Administrator to reconsider the notice to modify within 30 days after receiving the notice, and, except in the case of an emergency requiring immediate action in the interest of safety, the filing of the petition stays the notice pending a decision by the Administrator.

(b) The Administrator may amend an approved security program if it is determined that safety and the public interest require the amendment, as follows:

30 days after the certificate holder receives the notice, unless the certificate holder petitions the Administrator to reconsider the amendment, in which case the effective date is stayed by the Administrator.

(3) If the Administrator finds that there is an emergency requiring immediate action with respect to safety in air transportation or in air commerce that makes the procedure in this paragraph impracticable or contrary to the public interest, the Administrator may issue an amendment, effective without stay, on the date the certificate holder receives notice of it. In such a case, the Administrator incorporates the findings, and a brief statement of the reasons for it, in the notice of the amendment to be adopted.

(c) A certificate holder may submit a request to the Administrator to amend its program. The application must be filed with the Administrator at least 30 days before the date it proposes for the amendment to become effective, unless a shorter period is allowed by the Administrator. Within 15 days after receiving a proposed amendment, the Administrator either approves or denies the request. Within 30 days after receiving from the Administrator a notice of refusal to approve the application for amendment, the applicant may petition the Administrator to reconsider the refusal to amend.

#### **§ 108.27 Evidence of compliance.**

On request of the Administrator, each certificate holder shall provide evidence of compliance with this part and its approved security program, effective December 12, 1986.

Docket No. 24719 (50 FR 28894) Eff. 7/16/85, (Amdt. 108-3, Eff. 7/11/85); (Amdt. 108-3A, Eff. 12/12/86)

#### **§ 108.29 Standards for security oversight.**

[(a) Each certificate holder shall ensure that:

(1) Each person performing a security-related function for the certificate holder has knowledge of the provisions of part 108, applicable Security Directives and Information Circulars promulgated pursuant to § 108.18, and the certificate holder's

for each instance of noncompliance with this part, the certificate holder's security program, and applicable Security Directives; and

(b) The requirements prescribed in paragraph (a) of this section apply to all security-related functions performed for the certificate holder whether by a direct employee or a contractor employee.】

【(Amdt. 108-10, Eff. 9/19/91)】

**【§ 108.31 Employment standards for screening personnel.**

【(a) No certificate holder shall use any person to perform any screening function, unless that person has:

(1) A high school diploma, a General Equivalency Diploma, or a combination of education and experience which the certificate holder has determined to have equipped the person to perform the duties of the position;

(2) Basic aptitudes and physical abilities including color perception, visual and aural acuity, physical coordination, and motor skills to the following standards:

(i) Screeners operating X-ray equipment must be able to distinguish on the X-ray monitor the appropriate imaging standard specified in the certificate holder's security program. Wherever the X-ray system displays colors, the operator must be able to perceive each color;

(ii) Screeners operating any screening equipment must be able to distinguish each color displayed on every type of screening equipment and explain what each color signifies;

(iii) Screeners must be able to hear and respond to the spoken voice and to audible alarms generated by screening equipment in an active checkpoint environment;

(iv) Screeners performing physical searches or other related operations must be able to efficiently and thoroughly manipulate and handle such baggage, containers, and other objects subject to security processing; and

(v) Screeners who perform pat-downs or hand-held metal detector searches of persons

media, credentials, airline tickets, and labels on items normally encountered in the screening process;

(iii) Provide direction to and understand and answer questions from English-speaking persons undergoing screening; and

(iv) Write incident reports and statements and log entries into security records in the English language.

(4) Satisfactorily completed all initial, recurrent, and appropriate specialized training required by the certificate holder's security program.

(b) Notwithstanding the provisions of paragraph (a)(4), the certificate holder may use a person during the on-the-job portion of training to perform security functions provided that the person is closely supervised and does not make independent judgments as to whether persons or property may enter a sterile area or aircraft without further inspection.

(c) No certificate holder shall use a person to perform a screening function after that person has failed an operational test related to that function until that person has successfully completed the remedial training specified in the certificate holder's security program.

(d) Each certificate holder shall ensure that a Ground Security Coordinator conducts and documents an annual evaluation of each person assigned screening duties and may continue that person's employment in a screening capacity only upon the determination by that Ground Security Coordinator that the person:

(1) Has not suffered a significant diminution of any physical ability required to perform a screening function since the last evaluation of those abilities;

(2) Has a satisfactory record of performance and attention to duty; and

(3) Demonstrates the current knowledge and skills necessary to courteously, vigilantly, and effectively perform screening functions.

(e) Paragraphs (a) through (d) do not apply to those screening functions conducted outside





